

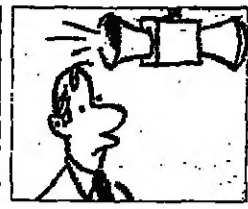
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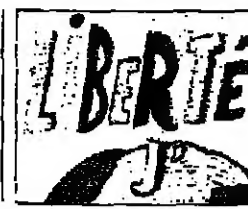
MONDAY MARCH 15 1999



Jobs for life
Japanese risk-takers
break the mould
Page 15



Laughter at work
The bigger the boss,
the greater the mirth
Lucy Kellaway, Page 10

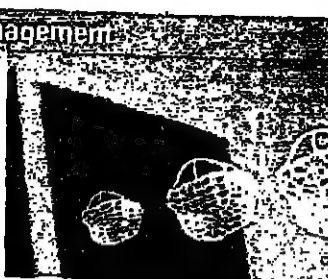


Pompidou's patronage
Political will and
immortality through art
The Arts, Page 13

Today's survey
Life Sciences: merger
pressures on drug groups
Separate section

Mastering Information Management

The FT's 12-part series on the I in IT continues today.
Part Seven:
electronic commerce
Separate section



WORLD NEWS

Bonn sees the need for EU to have its own military staff

The European Union may need its own military staff and policy institutions if it is to take decisions on military action without using Nato resources, says a German discussion paper.
Page 16

Berger under pressure to quit
US national security adviser
Sandy Berger is under pressure to quit after being accused of not acting swiftly enough to protect US nuclear laboratory secrets. A report accuses China of stealing military secrets including neutron bomb technology.
Page 16

Sarbanes told to act on report
Pressure is growing on European Commission president Jacques Sarbanes to sack any commissioners criticised in a report on fraud and management standards in the EU executive.
Page 2

Kosovo peace talks restart
The Kosovo peace talks between Serbs and ethnic Albanians resume in Paris today. Yugoslav troops drove ethnic Albanians out of villages near rebel-held mountains in Kosovo and destroyed their homes.
Page 2

Criminals foiled, says Lloyd's
Lloyd's of London insurance market said US crime syndicates' infiltration attempts had been foiled. The attempted fraud is thought to involve bogus US insurers that collect premiums but liquidate when a big claim arises.
Page 6

Ethiopia launches new offensive
Eritrea said neighbouring Ethiopia had launched a fresh offensive in their 10-month war, breaking a two-week lull in the fighting.

Annan backs off Khmer Rouge trial
UN secretary-general Kofi Annan has backed away from pushing for an international tribunal to prosecute former Khmer Rouge leaders for genocide.
Page 4

Ecuador's banks brace for run
Ecuador's private banks expect mass withdrawals when they open their doors to the public today for the first time in 10 days following a run on deposits the week before.

Poll win for Malaysian PM's party
Mahathir Mohamad's ruling Barisan Nasional party won a landslide victory in Sabah state in the first election since the Malaysian prime minister provoked a backlash by sacking his deputy, Anwar Ibrahim.
Page 4

Afghan peace deal struck
Afghanistan's warring factions agreed in principle to set up a government with a shared executive, legislature and judiciary. A ceasefire will be discussed in further talks.
Page 6

Balloons' hopes still high
Brian Jones and Bertrand Picard, British and Swiss pilots of the Breitling Orbiter 3 round-the-world balloon effort, broke the 14,235-mile record for an unrefuelled non-stop flight set last year by Steve Fossett of the US.

BUSINESS NEWS

Telecom Italia plans to axe one in three staff in restructure

Telecom Italia is planning to cut about 40,000 of its 124,000 workforce as part of its restructuring to thwart Olivetti's hostile €53bn (\$57.5bn) bid. About half the reduction would come from the demerger or disposal of non-core assets, but the rest would mean job cuts in its core telecommunications business.
Page 17; Lex, Page 16

Nissan Motor and Renault are reported to be close to agreeing a strategic alliance, including a capital tie-up, after top-level meetings between the two vehicle groups in Paris.
Page 22

Croatia aims to complete the first part of the privatisation of its telecommunications utility during the third quarter this year in the flagship deal of the belated programme to sell key state assets.
Page 21

Japan Tobacco will accelerate its diversification plans despite its \$8bn acquisition of the international cigarettes business of RJR Nabisco.
Page 20

LVMH chairman Bernard Arnault is preparing to freeze the French luxury goods group's stake in Gucci of Italy at below 35 per cent for at least three years.
Page 20

Credit Lyonnais is to allow institutional investors to buy stakes of up to 10 per cent under the bank's privatisation, officially launched by the French government.
Page 17

Warren Buffett, one of the world's leading investors, has delivered a broadside over the state of US accounting, describing the attitude of many US executives to financial reporting as "a business disgrace".
Page 17

Arthur Andersen, the global Big Five firm, is poised to poach a leading national practices from a rival international firm in a move that would mark its biggest success in a campaign to attract disaffected partners from competitors.
Page 17

Two graduates from Cambridge, England, who started their internet business in a bedroom four years ago while still students, are in talks with US venture capitalists on the sale of a stake that will value the company at about \$30m.
Page 18

Indonesia closed 38 banks and nationalised seven in what the International Monetary Fund called a "decisive breakthrough" in reforming the country's banking sector.
Page 5

Xaar, Cambridge-based ink jet printing technology group, is to acquire Modular Ink Technology, Stockholm, for \$5.5m.
Page 18

Ssangyong Oil and SK Corp's planned merger to create South Korea's biggest oil refiner appeared to be under threat after Ssangyong Oil's largest shareholder Aramco voiced "serious" concerns.
Page 19

Lafontaine blames colleagues

By Ralph Atkins in Bonn

Oskar Lafontaine yesterday broke his silence following his dramatic resignation as German finance minister last week, accusing former government colleagues of "poor teamwork" and of failing to support his controversial tax reforms.

The comments reflected the deep frustration felt by Mr Lafontaine, whose resignation ended a power struggle with Gerhard Schröder, the German chancellor, and came as cabinet ministers presaged a clearly more pro-business stance by the centre-left Bonn government. Werner

Former German finance minister hits at 'poor teamwork'

Müller, who as economics minister has responsibility for federal financial affairs until next month when Hans Eichel, Hesse prime minister, takes over the finance ministry, indicated a softer line on shutting the country's 19 atomic power stations. There would be no "forced" closure, he said on ZDF television.

Mr Müller also said government proposals for capping corporate tax rates from next year at 35 per cent - compared with present rates in excess of 60 per cent - should be ready before the summer parliamentary break.

The move would be welcomed by industry, which protested fiercely at Mr Lafontaine's legislation that closed many loopholes benefiting business.

Even before last year's election, Mr Schröder pushed for a 35 per cent top corporate tax rate for all businesses, regardless of their legal form.

Speaking in his native Saarbrücken, however, Mr Lafontaine, who also stood down as chairman of the ruling Social Democratic Party (SPD), said his measures had been misrepresented and had not been backed

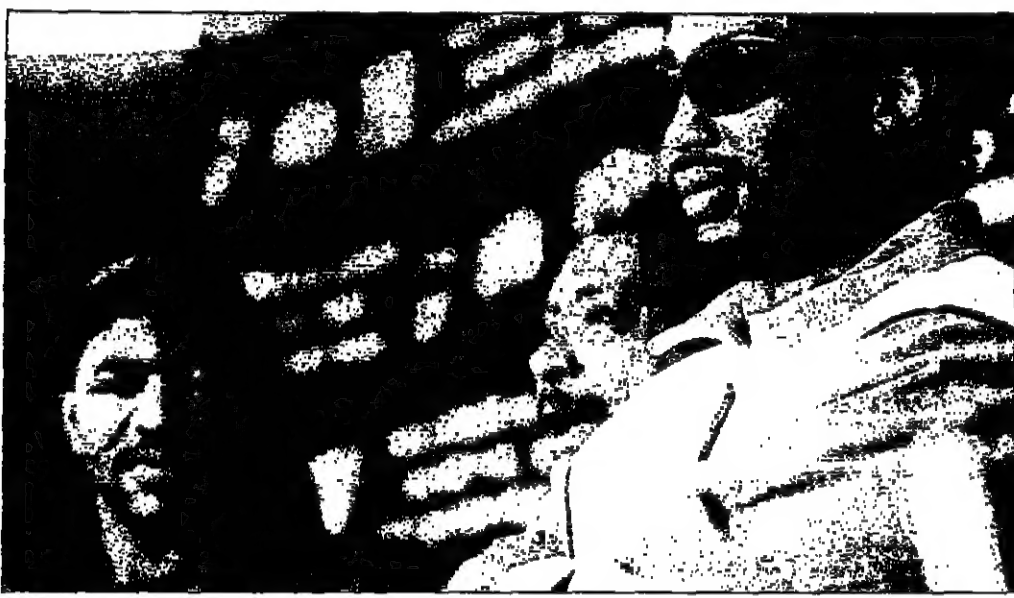
adequately by colleagues. He did not mention the chancellor by name but said the "[government] team discussed whether we were pursuing a business-hostile policy" when small and medium-sized family businesses would actually be DM5bn (£2.5bn) better off.

Mr Lafontaine added: "Team work requires that you watch out for each other and that you stick together, especially in public." Mr Lafontaine said that since an attempt on his life in 1990, he had wondered how he could combine the burdens of office with a family.

ily. "Now, after many years, I have decided on a private life."

The absence of direct criticism of Mr Schröder or other ministers will come as a relief to the government. Senior figures in the coalition were happy last night to admit errors in co-ordination and teamwork but regarded Mr Lafontaine's departure as offering a "second chance" after a difficult first four months in office. Seeking to create an air of normality, Mr Schröder today starts a week-long tour of European capitals.

Shake-up expected, Page 3
Editorial Comment, Page 15



Boxing promoter Don King (centre) with Lennox Lewis (right) and Evander Holyfield after the fight.

Promoters win by knock-out

By Patrick Harverson in London

Promoters and broadcasters emerged as the only clear winners from boxing's latest debacle as controversy raged around the decision of the judges to rule Saturday night's world heavyweight championship fight in New York a draw.

Within moments of the final bell sounding, the pressure was mounting for a rematch between Evander Holyfield of the US and Lennox Lewis of Britain that could generate more than \$100m in revenues for the powerful interests that control boxing.

The two biggest beneficiaries of a second fight would be Don King, the promoter who masterminded the Holyfield-Lewis bout, and Home Box Office, the giant

US cable television company that broadcast the proceedings from Madison Square Garden on its pay-per-view channel, TVKO.

Early returns indicate more than 1.2m US subscribers paid \$50 to watch the fight, bringing in about \$60m to the event's backers. Another \$15m-plus was earned from the 21,300 ticket sales, plus \$8.5m from the fee charged to Madison Square Garden to host the fight.

Given the row that erupted over the outcome of the fight - the three ringside judges failed to award Lewis the bout even though he landed 348 of his punches compared to Holyfield's 130 - a rematch would prove even more lucrative.

There was speculation it could be held outdoors at Yankee Stadium, the baseball stadium in the

Bronx that could hold 50,000-60,000 for a championship fight. The other main beneficiaries of a rematch would obviously be the two fighters. Holyfield was paid \$30m to defend his two world titles, while his British opponent earned \$10m to put his lone title up for grabs.

The biggest loser on Saturday night was boxing's already battered integrity. "It is the kind of decision that will hurt boxing as much as Mike Tyson biting Holyfield's ear in 1997," said Timothy Smith, who reported the fight for The New York Times.

Lou Di Bella, a HBO senior vice-president, who is the most powerful man in televised boxing, said the result was a travesty of justice. He summed up the decision in two words: "It stunk."

Summers warns on risks of dollarisation

By Stephen Fidler and Richard Lapper in Paris

Larry Summers, US deputy treasury secretary, yesterday expressed in the most concrete terms yet the limits to possible US co-operation with any country deciding to adopt the dollar as its national currency.

A debate over whether other governments could expect co-operation with the US in "dollarising" their economies followed Argentina's announcement in January that it was considering such a move. Other Latin American countries, such as El Salvador, are considering dollarisation as dissatisfaction mounts with alternative exchange rate regimes.

Aides said Mr Summers' remarks were meant to strike a neutral tone but amplify the constraints on co-operation. Speaking to a conference ahead of the Inter-American Development Bank's annual meeting in Paris, he said the US could not be expected to allow another country access to the Federal Reserve discount window or alter monetary policy procedures to take account of another country's economic needs.

Adopting the dollar would require "careful and extended analysis". Dollarisation offered stability by lending US credibility to a country's economic and financial policies as well as helping its integration with the world economy, Mr Summers said.

"However, the country must also be prepared to embrace the lack of flexibility it brings," he said, adding this meant losing control over interest and exchange rates.

"It wouldn't be appropriate for the US authorities to adjust their bank supervisory responsibilities, access to the Federal Reserve discount window or procedures for orientation of US monetary policy in light of another country's decision to dollarise its monetary system," he said.

His remarks left open the possibility that the US would agree to share "seigniorage" - the interest on foreign exchange reserves that countries would lose by adopting the dollar and the US would gain - and also of an increased dialogue with dollarising economies over economic policies.

Argentina, which has started discussions with the US on dollarisation, has been informed of the substance of Mr Summers' remarks, which reinforce reservations expressed by Alan Greenspan, Federal Reserve chairman, about extensive co-operation over monetary policy with dollarising economies.

Pedro Pou, president of the Argentine central bank, said: "Countries which do not join a currency union may find it too dangerous to keep the capital account open."

IMB conference, Page 6; Conditions ease for Brazil's borrowers, Page 20

Microsoft and Intel set for telecoms link-up

By Richard Waters in New York and Roger Taylor in San Francisco

Microsoft and Intel are expected today to announce a joint attack on the fast-growing telecommunications equipment business, marking their biggest push yet into an industry worth an estimated \$250bn a year.

Together with hardware suppliers Hewlett-Packard and Nortel, the two are expected to unveil an alliance that, if successful, could open up a huge new market for Microsoft's Windows NT operating system and Intel's Pentium microprocessors. Most telecoms equipment currently operates on proprietary software using chips produced by a range of manufacturers, including Motorola.

The venture could also advance the introduction of corporate networks combining voice, data and video signals on the same infrastructure. At present, the telecoms bridge between most companies and the public network handles only voice traffic, and sits alongside separate data equipment.

The plan is for Nortel to build routers, switches and servers for corporate computer networks running Microsoft NT software and handling both data and voice communications.

Roger Werry, executive vice-president of Renaissance Worldwide, a consulting firm, said the technology alliance

could act as a wedge giving Intel and Microsoft their first big stake in telecoms equipment. By introducing the open technology architecture of Microsoft and Intel's "WinTel" alliance it could also bring down prices rapidly, he added.

Nortel initiated the new four-way alliance, in a departure from usual practice in the telecoms equipment market. Competitors such as Cisco Systems and Lucent Technologies produce both the hardware and the software needed for their equipment.

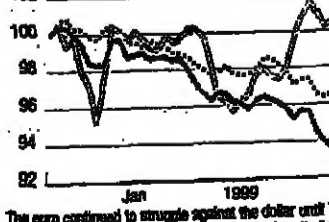
The venture could give Nortel the opportunity to get in on the ground floor of a growing market, even if it runs the risk of undermining its profitable voice telecoms business lines.

Other telecoms equipment suppliers could eventually be brought into the alliance if it proved successful. It is understood that the new range will be marketed by Hewlett-Packard under its brand name. Hewlett-Packard has an alliance with Cisco Systems to provide systems to network operators such as telephone companies and internet service providers.

Windows NT has yet to gain a foothold in the telecoms industry, although it has fared better with banks and retailers. Critics claim that it is less suited to large-scale applications than rival Unix.

Progress of the euro

Currents vs euro (released Jan 1 1999-100)



The euro continued to struggle against the dollar until Thursday's shock revelation of Oskar Lafontaine, the German finance minister, said it should be higher. It slipped back on Friday but showed the week well up.

Euro exchange rates

Dollar	1.0844
Yen	130.447
Sterling	0.6686
Swedish krona	8.6719
Danish krone	7.4336
Greek drachma	321.432
Swiss franc	1.5999

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Belgium	DM 300	Iceland	ISK 173
Denmark	DKK 136	Italy	1,300 (€2.07)
France	FF 163	Japan	¥175
Germany	DM 100	Korea	₩100
Greece	€100	Latvia	Lat 1.35
Ireland	€100	Lithuania	Lit 1.35
Italy	€100	Malta	Mal 1.35
Spain	€100	Netherlands	ƒ 1.35
Sweden	€100	Poland	zł 1.35
Switzerland	€100	Portugal	Esc 200
United Kingdom	€100	Romania	Lei 1.35
United States	€100	Slovakia	Sk 1.35
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CONTENTS

World News: International 2.5	Comment & Analysis: 14.15
Europe 3, Asia Pacific 4, US 6	Companies & Finance: 17-22
Management / Technology: 10-12	Markets: 31-33
Full contents and Lex: back page	



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WORLD NEWS

EUROPE

KOSOVO NEGOTIATIONS RESULT EXPECTED WITHIN A WEEK

Make-or-break peace talks resume

By David Buchan, Diplomatic Editor, in London and Guy Dimmock in Mitrovica, Kosovo

The Kosovo peace talks between Serbs and ethnic Albanians resumed today in Paris for what the French and British chairmen hope will be a reasonably short make-or-break session. The previous negotiations at Rambouillet in France last month broke up after 18 days when Kosovo Albanian representatives demanded time to consult their political and military ranks at home, while Serbian negotiators balked at the prospect of a foreign peacekeeping force.

The Contact Group of mediating countries - comprising France, Britain, the US, Russia, Germany and Italy - is trying to get the two sides to agree on self-government, but not independence, for the ethnic Albanian majority in Kosovo.

Kosovo is part of Serbia, the larger of Yugoslavia's two provinces. Yugoslav army troops were yesterday in control of

a string of villages in the foothills of the rebel-held Cacak mountains in northern Kosovo, after driving out several thousand ethnic Albanian inhabitants and shelling and torching their homes.

An intense artillery bombardment on Saturday drove separatist rebels of the Kosovo Liberation Army (KLA) deeper into the mountains west of the main town of Vucitrn. Serbian and Albanian negotiators return to the talks with their public positions little changed in the three weeks since Rambouillet. Ethnic Albanian negotiators have for some time indicated they are on the verge of signing the draft peace agreement and have come under heavy pressure to do so.

Hasim Thaci, the effective head of the Albanian delegation, said at the weekend that his side would give its "definitive answer" in Paris.

For his part, President Slobodan Milosevic of Yugoslavia still resists the west's demand, restated last week

by Richard Holbrooke, US envoy, that it should be allowed to deploy peacekeepers to shore up any settlement.

However, France and Britain intend the new round of talks to focus on military implementation. They say they will resist attempts to reopen negotiations on the political power-sharing part of the draft deal, which they claim was substantially agreed by both sides at Rambouillet.

In contrast to Rambouillet, which overran several deadlines, no time has been set for the new talks. "The trouble with deadlines is that nothing happens until the deadline," said Robin Cook, UK foreign secretary, at the weekend. Nonetheless, the UK and France have made clear they want a result within a week.

It is likely, the Albanians accept the peace deal, then the Serbs refuse it, then the latter will expose themselves to the risk of NATO air strikes.

NATO has repeatedly threatened to bomb Belgrade



Belgrade citizens release white doves to mark the resumption today of Kosovo peace talks

If it is seen to be the clear obstacle to peace.

General Wesley Clark, NATO's top commander, acknowledged Mr Milosevic's brinkmanship, saying the Yugoslav leader was "wily,

shrewd and calculating". But, speaking at the weekend, the NATO general claimed: "We are in a good position today because he [Mr Milosevic] respects NATO air power and is very well

aware of what it can do". EU foreign ministers, meeting informally in Eilatville, Germany, over the weekend, repeated their calls on both sides to sign the Rambouillet peace deal.

'Fine tuning' for EU farm reform deal

By Peter Norman in Berlin, Germany

European Union foreign ministers yesterday agreed not to reopen last week's complex compromise reform of the EU's common agricultural policy, but called instead for detailed "fine tuning" of the settlement to trim its overall cost.

Delivering a bullish interim assessment of the Agenda 2000 negotiations on reform of the EU's budget, farm policies and structural funds, Joseph Fischer, German foreign minister, said the European Commission would work out proposals for cutting the overall cost of the farm package from €288.3bn (\$315bn) to €269.3bn in the seven years from 2000 to 2006.

The lower figure would represent a stabilisation of farm outlays around the annual level of €40.5bn, demanded by EU heads of government last month. Mr Fischer and Jacques Santer, Commission president, said the savings could come from cuts in direct aid to farmers.

After an informal weekend meeting of foreign ministers, Mr Fischer said there was also "light at the end of the tunnel" in negotiations on the level and type of structural funds to be granted to the EU's poorer regions in 2000 to 2006. Special arrangements would be made to help Ireland and Portugal, which stand to lose heavily under Commission proposals for structural policy reform.

The main problems to be solved by EU leaders at their special summit in Berlin on March 24-25 would relate to the financing of the EU budget. These included Germany's wish for a reduction in its €11bn net contribution and pressure from other EU countries for cuts in or the elimination of the UK budget rebate, negotiated by Margaret Thatcher, prime minister, in the 1980s.

Mr Fischer acknowledged that the British rebate issue was difficult as it symbolised a much wider debate in Britain about the UK's position in the EU. German Chancellor Schröder, German minister, will discuss it tomorrow with Tony Blair, UK prime minister, when he visits London on a tour of European capitals in search of compromises for the Berlin summit.

Robin Cook, the UK foreign secretary who has been battling to keep the rebate, claimed yesterday that Britain was "getting the message across that the rebate is not for negotiation". He added: "I believe we will emerge from Berlin with the rebate as good as ever."

Although the CAP reform, agreed by farm ministers after two marathon negotiating sessions in Brussels, is due to come under critical scrutiny from EU economics and finance ministers today, the foreign ministers' talks should mean that the price cuts and other decisions affecting agricultural markets remain unchanged.

G7 still wary despite Russia's IMF optimism

By John Thornhill in Moscow and Stephen Fidler in Washington

The Group of Seven industrialised nations still appears ambivalent about whether to resume immediate financial assistance to Moscow, as the Russian government insists it can clinch an agreement with the International Monetary Fund by the end of March.

Following talks with senior IMF officials in Washington, Victor Chernomyrdin, the former Russian prime minister and unofficial

government envoy, became the latest in a long line of Russian politicians to predict a speedy deal.

"Today I am convinced that everything can be done in March, precisely in March. And it is very important not to go beyond March," Mr Chernomyrdin said on Saturday, before returning to Moscow to brief Yevgeny Primakov, prime minister.

Mr Primakov has promised to devote this week to economic issues, before flying to Washington on March 22 for talks with Al Gore, US

vice-president, and the IMF. The Russian media are already portraying the trip as the "make-or-break" event in Mr Primakov's six-month premiership.

The IMF, which suspended its lending programme to Russia following last August's crash, has said the two sides have reached a "common understanding" of the government's fiscal problems - after months of inconclusive talks. But the IMF still insists the government must raise its primary budget surplus from 2 per cent of gross domestic product

to closer to 4 per cent. The lower house of Russia's parliament complicated the government's task on Friday by voting to reduce VAT from July 1, a move opposed by the IMF.

Anders Aslund, a Russian specialist at the Washington-based Carnegie Endowment for International Peace, dismissed all talk of an imminent deal between the IMF and Moscow as "media hype".

"The Russian government is not prepared to make any compromises on anything. And Washington is not in a

mood to be bullied," he said. But other observers argued the IMF talks had moved from the economic to the geopolitical realm, suggesting an outline agreement could soon be reached even if disbursements were delayed. As in the past, the Russian government has played on western fears that the country will implode unless further assistance is forthcoming.

Although the G7 countries unanimously insist Russia must sign up to a new IMF programme, they appear divided about how to deal

with the country's \$150bn external debt.

The US administration has hinted it might lobby other western governments to write off much of Russia's Soviet-era debt. But Bonn, which owns half of Russia's \$60bn of sovereign debt, has rejected any talk of debt forgiveness while acknowledging the necessity of rescheduling repayments.

"If Russia is well managed it has the potential to be a rich country. Therefore debt forgiveness is out of the question," said a German finance official.

Santer under pressure to act on report

By Emma Tucker in Brussels

Jacques Santer, president of the European Commission, was under mounting pressure last night to dismiss any commissioners criticised in a report on fraud and management standards inside the EU executive, to be published today.

The 214-strong Socialist group - the largest in the European Parliament - issued a statement telling Mr Santer that his own head would be "on the block" if he failed to take swift and appropriate action.

The warning reflected a growing determination in parliament to ensure that Mr Santer does not dodge tough decisions if damning evidence against commissioners comes to light.

Those most under threat are thought to be Edith Cresson, the former French prime minister, and Manuel Marín, the Spanish vice-president of the Commission.

Yesterday, Pauline Green, leader of the Socialists, made clear that the Committee of Wise Persons' report should be treated as the benchmark for judging the behaviour of individuals and the Commission as a whole.

"We expect Jacques Santer to take rapid and decisive action as soon as the inquiry report is published," Mrs Green said. "If the report shows wrongdoing by any individual then, whoever they are, they must be rooted out."

Although the Commission term ends this year, the removal of individuals from its college could severely complicate the functioning of the executive as it tries to steer difficult negotiations on the future of the EU's budget.

The 11 commissioners interviewed by the five-strong panel of independent experts - set up by parliament to probe allegations of fraud, nepotism and mismanagement - were invited yesterday to see the parts of the report that referred to them.

Commission sources said a majority of those invited had attended private sessions, including Mrs Cresson and Mr Marín.

Mr Santer and José María Gil-Robles, president of the parliament, will receive the report at 5pm today. An emergency meeting of the Commission has been arranged for later in the evening to decide what action to take.

A senior Commission official close to Mr Santer said the president would make a decision tonight on whether to press for the dismissal of one or more of his colleagues.

Mrs Cresson, responsible for research and education, has faced allegations over recent months concerning appointments to her inner circle and failure to ensure that projects under her management were properly run.

Rebel deputies pose threat to Turkish poll

By Leyla Boulton in Ankara

Turkey is braced for renewed political chaos if rebel parliamentarians manage to postpone elections due next month.

"Chaos is now awaiting Turkey," Bolent Ecevit, the caretaker prime minister, said at the weekend when deputies who had not been nominated as parliamentary candidates joined forces with hardline members of the Islamist Virtue party to vote to reopen parliament. The assembly had closed ahead of campaigning for early general and local elections on April 18.

A protracted parliamentary session could complicate the run-up to elections.

The vote coincided with the petrol bomb attack on an Istanbul department store, which killed 13 people. The attack was the worst in a series triggered by Turkey's capture last month of Abdullah Ocalan, leader of the Kurdish PKK guerrilla organisation, who is awaiting trial.

Postponing the elections until 2000 would hamper

Turkey's push for stability. The country would be run in the interim by a weak government unable to carry out economic reforms or take political action to undercut support for the PKK.

Turkish financial markets have rallied recently on hopes that an election held soon after Mr Ocalan's capture would produce a strong secularist government.

Hardliners within Virtue's 144-strong parliamentary group want to use the threat of a delay to elections to secure the lifting by the 850-strong parliament of an electoral ban on Necmettin Erbakan, eminence grise of the Islamist movement, and Recep Tayyip Erdogan, former mayor of Istanbul. They were banned from political life after the closure of Welfare, Virtue's predecessor.

Some independent politicians argue that postponing the elections could help democracy. "If we succeed, this will be the beginning of democratisation in Turkey," said Gökhan Çapoglu, who set up his own party after being expelled from Mr Ecevit's.

El Al crash study set to rebuke Dutch ministers

By Gordon Cramb in Amsterdam

The Dutch government today enters a tense two weeks as a parliamentary commission compiles a report likely to criticise ministerial handling of the 1992 El Al air crash in an Amsterdam suburb, which killed at least 43 people.

Hearings which concluded on Friday revealed that intensive contacts between the transport and health ministries began only last year, although there had long been unexplained ailments among residents of the area where the cargo jet came down.

The Boeing 747, on which an engine mounting failed as it took off for Tel Aviv en

route from New York, was carrying depleted uranium as ballast. Its hold contained an ingredient for making the nerve gas sarin.

But it was not until after the inquiry got under way this year that the full list of its cargo came to light. Investigators located the documents at a US shipping agency, and discovered that the state-owned Israeli carrier had been given a copy just after the crash.

El Al and the Israeli government, which had both maintained they were providing The Hague with full co-operation, said a misunderstanding was to blame for the failure to hand over the papers. Wim Kok, Dutch prime minister, described

the delay as "painful and disturbing".

Much of the attention during some 150 hours of hearings centred on The Hague's response to the disaster. In spite of the health complaints and unanswered questions, the issue soon slipped from the cabinet agenda. Eight ministries compiled dossiers but did little to exchange information.

Most at risk from the report, due by the end of the month, are Mr Kok's two deputy premiers, Annemarie Jolitsma, transport minister in 1994-98 and now in charge of economic affairs, and Els Borst, health minister, have indicated they will resign if found negligent.



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LAFONTAINE'S RESIGNATION CLOSEST ADVISERS LIKELY TO BE REPLACED WITHIN THE NEXT MONTH • OBSERVERS PREDICT EARLIER CUT IN SHORT-TERM INTEREST RATE



Oskar Lafontaine: change of leadership at the finance ministry will have repercussions for advisers AP

Shake-up expected at ministry

By Wolfgang Münchau in Frankfurt

Oskar Lafontaine's resignation as Germany's finance minister is expected to trigger a shake-up in the ministry's top team, with two of his closest advisers likely to be replaced within the next month.

State secretaries Heiner Flassbeck, who has been responsible for international economic policy co-ordination, and Claus Noé, who has been in charge of budgetary affairs, are both expected to leave the finance ministry in the wake of Mr Lafontaine's resignation.

Mr Flassbeck has been Mr Lafontaine's closest economic policy adviser and was influential in shaping the former finance minister's core economic beliefs. He was also the mastermind behind the controversial proposal to set up currency target zones to limit exchange rate fluctuations between the world's largest currencies.

The change in leadership at the finance ministry is also expected to lead to a more relaxed atmosphere between the German government and the European Central Bank. Many ECB-watchers believe Mr Lafontaine's resignation will bring forward a reduction in the short-term interest rate from the current benchmark of 3.0 per cent.

The ECB's governing council is due to meet for its fortnightly council session on Thursday. A cut in interest rates this week, however, is considered unlikely by close observers.

The upheaval in German politics may also affect the close relations between the German and French finance ministries. Mr Lafontaine, a fluent French speaker, and his team of top advisers have been instrumental in improving the policy co-ordination between the finance

ministries of the two countries.

Hans Eichel, finance minister designate, is likely to focus more strongly on domestic economic policy issues. His appointment, which will take effect in early April, is also likely to shift the balance of German economic politics from Mr Lafontaine's macroeconomic approach back towards structural reform and supply-side policies.

As premier of Hesse, the state that contains the financial capital Frankfurt, Mr Eichel has developed a reputation as a pragmatist, who has forged good relations

with Frankfurt's commercial banks, the Bundesbank and the Frankfurt-based ECB.

His appointment is also likely to boost the chances of Ernst Welteke, president of the Hesse state central bank, to take over as president of the Bundesbank. Hans Tietmeyer, current president, is due to retire this summer.

Until Mr Eichel's move to Bonn, Germany's finance ministry will be run by Werner Müller, economics minister. Mr Müller will also take part in today's meeting of European finance ministers in Brussels.

Editorial Comment, Page 15

EU withholding tax proposal still alive and kicking

In spite of the loss of one its strongest advocates, the plan to levy a charge on savings remains, write Vincent Boland and Emma Tucker

Oskar Lafontaine may have gone, but one of the former German finance minister's favourite subjects – a proposal to levy a withholding tax on savings – is still alive and kicking.

The European Commission's proposal for a minimum 15 per cent withholding tax has won strong backing from the European Parliament, and Germany, which holds the European Union presidency, wants it adopted. But opposition to the plan is building. Luxembourg has joined the UK in leading attacks on the proposal, which both countries claim would seriously damage the \$3,500bn global bond ("eurobond") markets in which they play large roles.

A report out today suggests the tax would undermine the credibility of Europe's capital markets, especially those of the City of London, the leading international financial centre. It argues that the global bond market is a crucial asset for Europe, not just the UK.

Luc Frieden, Luxembourg's budget and justice minister, said this month the EU directive would damage the country's banking secrecy laws. He also suggested opposition to the move went beyond the UK and Luxembourg.

"There are still too many problems, and no discussion on the subject has yet taken place at EU finance minister level," he said. Luxembourg's many private banks are big investors in the sector on behalf of clients throughout Europe and many of the bonds are listed on its stock exchange.

Mr Frieden's comments have been welcomed by opponents of the tax in the UK. Clifford Damers, secretary-general of the International Primary Market Association (IPMA), a trade body, said: "There was always a risk that the UK would find itself isolated. There is a better chance of the chancellor [the UK's finance minister] standing firm if he's not the only one who opposes it."

Eleven EU member states do not tax interest on the savings of individuals based in other member states, a ploy to attract capital. The Commission argues that this leads to a distortion of the single market and widespread tax evasion.

It has asked accountants Ernst & Young to study the impact of the directive on the international bond markets. Studies in London say between 5 and 7 per cent of the global bond market would relocate outside the EU – either in the US or more probably, Switzerland – and that 10 per cent of those employed in the industry would lose their jobs.

The Swiss parliament will stir up discussion in the EU when it begins a debate today on the abolition of stamp duty on international transactions on the Swiss stock exchange. Swiss officials are setting up a secondary market to trade global bonds and expect to win at least \$Fr1,000bn (\$85bn) of business in two years.

The latest critical report on the tax plan, by the Centre for Policy Studies, the British free market think-tank, urges the UK government to use its veto to kill the withholding tax proposal, which it says would do nothing to curb tax evasion because other forms of tax-free investment would replace bonds.

"The withholding tax would be both damaging and ineffectual," says Richard Baron, the report's author. "Not only would it be a sledgehammer to crack a nut, the hammer would miss the nut and come down squarely on our toes."

But Mario Monti, the commissioner in charge of the proposed directive, claims the City of London has exaggerated the impact of the proposed law, particularly the fear that it would lead to a migration of investments to countries with no savings tax.

He says it would apply to individual holders of international bonds only, not institutional investors. Nor would it cover domestic residents, or non-EU residents.

The measure would affect only 8 to 12 per cent of all international bonds.

The UK government insists it will not approve any measure on withholding tax that includes global bonds. IPMA and the Corporation of London have been lobbying hard for international bonds to be exempted, although it is not clear whether Germany would agree.

"We would like to get an exemption and are trying to get it. The question is whether this is achievable," says Ivan Royle, who has been leading the Corporation of London's efforts to put the City's case in Brussels.

Luxembourg's opposition is unlikely to diminish before June's general election, and Commission officials say the chances of an agreement before then are slim. Brussels is determined to find a negotiated solution, but in the meantime, the UK and Luxembourg can prevent the directive becoming law as a tax measure, it has to be approved unanimously by ministers.

disappointed in the past because promises weren't kept.

"The reason for my resignation is the poor teamwork that we provided in the last few months. Without good teamwork you can't work together successfully. Teamwork requires that you watch out for each other and that you stick together, especially in public..."

Poor teamwork cited as reason for quitting

Oskar Lafontaine yesterday commented for the first time on the reasons for his resignation as Germany's finance minister last Thursday. The following is from his statement, reported by Reuters in Bonn:

"I would first of all like to say that the decision has nothing to do with the direction of politics that we have taken in the past months. We are proud that we have kept many of our promises. That's something new in politics, because voters were often disappointed in the past because promises weren't kept."

"One example – while we were able to cut taxes for small and medium-sized companies by DM5bn [€3.5bn, \$2.6bn], the team was discussing whether we were pursuing a business-hostile policy. Work that out for yourself."

"When the team doesn't play well together, the team has to be rebuilt. My step was a precondition for that. The new team is in place. I wish the new team success in their work with Gerhard Schröder."

"The question that certainly has to be discussed, is why I am only commenting now. I said that I needed some distance. And I especially wanted to avoid any self-justification to come out of my explanation. And I wanted to set an example that you cannot unburden yourself when you quit by putting burdens on others. I will say it again. The mistakes we made were made by all of us, and I

believe this is an approach we can all accept."

"Now a statement for the party itself. This step was naturally not easy for me. I have been in the party for 33 years and in leadership positions for 30. That's a longer time than many other politicians. That means the party is part of my life."

"Ever since the [1990] assassination attempt I have been asking myself how much further I want to continue with this great burden for my family and private life. And now after all these years I have made a decision for my private life. I hope the party will understand."

"I wish the party all the success. I will follow it with interest. I belong to the party."

"And there's something you should never forget. The heart isn't traded on the stock market yet, but it has a home. And it beats to the left. Thank you."

US policymakers relieved at departure

By Gerard Baker in Washington

US economic policymakers are unlikely to mourn the loss of Oskar Lafontaine from the international monetary landscape. There was no official reaction in Washington to his resignation last week, but privately the overriding sentiment was relief.

With trade pressures intensifying across the Atlantic, the principal American concern in the past six months has been that continental Europe should do more to promote domestic demand-led growth.

Concern about the sluggish European economy has become an dominant theme of meetings of the finance ministers and central bank governors of the Group of Seven industrialised countries. US officials are understood to believe the departure of the mercurial former finance minister increases the likelihood of stronger short-term and longer-term growth.

Like Mr Lafontaine, senior US administration officials have been disappointed at the failure of the European Central Bank to cut interest rates to get the European economy moving. But unlike Mr Lafontaine, US policymakers have kept their disappointment mostly to themselves, and saved their advice on policy for private conversations. They suspected

the former finance minister's outbursts were keeping the ECB from cutting interest rates, for fear of seeming to kowtow to politicians. If the ECB does not now move quickly to cut rates, the disappointment will be felt all the more keenly in Washington.

There is some hope too that Mr Lafontaine's resignation will make structural

reform of the German economy more likely. Most US officials see this as essential to restoring longer-term prospects for strong growth.

US administration officials have viewed the struggle between Mr Schröder and Mr Lafontaine with growing concern. When the Social Democrats won last September's election, most observers thought the new government would be a useful and constructive partner in the moderate centre-left politics of which US President Bill Clinton has been such an enthusiastic champion. They imagined Mr Schröder and

his *neue Mitte* allies would, like Tony Blair and his supporters in Britain, be willing to join the US in the battle to inject a bit more economic realism into the global policy debate.

But Mr Lafontaine's approach looked to Americans like a throwback to the inflexible, statist, welfare-dominated European past.

The circumstances of Mr Lafontaine's departure, with the German government under strong pressure from business to abandon some of its less business-friendly policies, are likely to give encouragement to the US that economic reform might now be a possibility.

But US observers acknowledge that Mr Lafontaine represented a strong strand of European opinion, which will not change overnight just because one of its most prominent advocates has gone.

As one international policymaker – not an American – put it last year, the European economic policy debate could be more intractable than some optimists think: "The European central bankers all think what Europe really needs is structural reform. The European politicians all believe what it needs is looser monetary policy. They are probably both right, but it's unlikely either of them will get their way."

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ASIA-PACIFIC

Annan cool towards Malaysia's ruling coalition celebrates landslide in Sabah

Khmer Rouge trial

By Ted Bardache
in Phnom Penh

Kofi Annan, United Nations secretary-general, has backed away from pushing for an international tribunal to prosecute former leaders of the Khmer Rouge for genocide after the Cambodian government rejected the conclusions of a UN report that recommends such a trial.

The move by Mr Annan dims the already fading prospects for an international tribunal for the former Cambodian rulers. It also comes just ahead of today's formal presentation to the UN Security Council and General Assembly of the UN report on a Khmer Rouge trial.

The 61-page report, drawn up by three international jurists at the request of the Cambodian government in 1997, recommends that the UN establish an *ad hoc* international tribunal outside Cambodia for crimes committed during the mid-70s Khmer Rouge regime, when as many as 2m Cambodians, or a fifth of the population, died from torture, execution, overwork and starvation.

The report based its conclusion on the idea that Cambodia lacks an impartial criminal justice system because of a series of failings, including corruption, political interference, imprecise legal foundations and a lack of personnel and funds.

Mr Annan reiterated those concerns in a meeting with Hor Namhong, the Cambodian foreign minister, on Friday.

The UN secretary-general said that the Cambodian judiciary in its current state was "unlikely to meet minimal justice standards" and that a South African-style truth commission, a mechanism that the UN report suggests could be used for lower level Khmer Rouge officials, is "not a substitute" for justice.

But Mr Annan did not personally endorse the report's call for an international tribunal. Despite requesting the report, the Cambodian government is not bound by its findings.

With China, once a Khmer Rouge ally, opposing an international tribunal unless the Cambodian government agrees, there appears to be

little consensus at the UN to pursue the issue vigorously.

The path has now been cleared for the Cambodian government to pursue a trial in a military court for Ta Mok, the former battlefield chief of the Khmer Rouge and the only top leader of the now-defunct rebel group in detention.

Most other Khmer Rouge leaders enjoy either formal or *de facto* immunity.

Mr Hor Namhong requested international assistance for the Ta Mok trial, a request which puts the international community in a quandary.

A great deal of time and foreign funding has been dedicated to documenting Khmer Rouge atrocities, documentation that would be invaluable for Cambodian prosecutors of Mr Ta Mok.

But international co-operation would also legitimise a trial by a suspect judicial system.

In their report, the UN experts warned against international participation in a local trial, because of concerns that it would be "subject to manipulation by political forces".

By Sheila McNulty
in Kota Kinabalu

Thousands of miniature wooden signs plastered with pictures of state politicians lined the streets of Sabah ahead of this weekend's election.

Dotted among them was a portrait of Mahathir Mohamad, prime minister, even though his name was not in the ballot.

But it was Malaysia's first election since Dr Mahathir provoked an unprecedented backlash against his 18-year rule by sacking his popular deputy, Anwar Ibrahim. Dr Mahathir knew the results would be used to gauge how much support is still commanded by the ruling Barisan Nasional coalition, and by extension, himself.

He won a landslide victory. Barisan seized 31 of the 48 seats and the biggest opposition party, the Christian-led Parti Bersatu Sabah, or PBS, took 17. But the poll was marred by charges of vote-buying and "phantom voters", and political analysts were unconvinced that Barisan would fare as well in the general election that



Deputy premier Abdulah Badaoui (seated centre) celebrates with party candidates yesterday. Reuters

must be held by April 2000.

"Although Mahathir has claimed this is an endorsement for him, I don't think people saw it as that in Sabah or on a national level, and I don't think he really sees it as that," said K.S. Jomo, professor in the faculty of economics and administration at the University of Malaya.

Sabah's elections are dominated by local issues, such as development. Mr Anwar's detention, beating and trial

on charges of abusing his power to conceal sexual misdeeds are known but too far away to be an issue. The parties that present the biggest challenge to Barisan on a national level are unknown in Sabah.

But the 73-year-old Dr Mahathir wanted to make a statement, and he fought vigorously, flying three times to Sabah in recent weeks, campaigning deep in remote forests by day and in cities by night. He brought

key members of his cabinet with him. But perhaps most effective were his threats of cutting federal assistance to the state if it failed to return Barisan to power.

In a village over water on stilts, Barisan flags - of a scale, symbolising justice - fluttered above unpainted wooden houses. "If Barisan wins, Sabah can develop," said a gaunt fisherman. On a nearby street of one-storey homes, a single PBS flag rose amid Barisan ones.

Ivie Liew, a teacher, emerged as proud owner to insist if the election were fair PBS would win. She considered undemocratic the warnings that the federal government would only provide generous aid to the state if it voted for the coalition. Harris Mohd Salleh, acting president of the Bersatu opposition party, said Barisan has ruled Sabah for more than 31 years. "If the Barisan National rule could bring economic development, Sabah today should be at par with other more advanced states of Malaysia."

PBS was convinced vote-buying and the issuing of identity cards to tens of thousands of immigrants to enable them to vote were why the opposition did not do better. Barisan has denied wrongdoing. The "phantom voters" have not been independently verified, and the Election Commission said there was no law against vote buying. "People are very angry," insisted Nicholas W.Y. Fung, PBS's assistant secretary general. Not enough, apparently, to vote against Barisan.

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Japanese consumers start to rein in the giving

By Naoko Nakamura and
Olivia Jensen in Tokyo

A peculiarly Japanese custom that normally boosts consumerism has become the latest victim of the country's deepening recession.

Yesterday's White Day is a Japanese twist on what is very much a western tradition: Valentine's Day. In Japan, Valentine's is a strictly one-way street - custom has it that only women may give gifts to men. White Day comes exactly one month later and is the day when men are required to return the favour.

But the romance of Valentine's Day has lost out to commercialisation, with female workers distributing out of a sense of duty dozens of *giri choco* - or "duty chocolates" - to their male colleagues. While these token gifts are small and cheap (typically costing ¥300-¥500 - \$2.50 - \$4.20) the sheer volume has traditionally made this a profitable business for retailers.

One month later, men are required to at least treble the value of their Valentine's gifts when they return them. Hence, White Day counters at department stores tend to be stocked with more expensive goods (ranging from ¥1,000 to ¥4,000) than those for Valentine's.

But with Valentine's Day falling on a Sunday, there was less pressure this year for women to buy chocolates for their colleagues. And amid Japan's worst recession since the war, consumers' reluctance to buy meant that sales of *giri choco* dropped significantly.

At Takashimaya's *Dagship* department store in downtown Tokyo at the end of last week, dozens of businessmen were swarming around display cases piled high with brand name ladies' scarves, handkerchiefs and accessories. While some were enjoying themselves, others looked harassed and most merely looked perplexed.

"I'm only buying a couple of White Day presents this year," said one 28-year-old businessman. "After all, I didn't get as many *giri choco* this year. And although I usually increase the value of the gift threefold or fourfold, I don't think I'll be spending as much this time."

Last month, anticipating falling numbers of *giri choco* sales, retailers put extra effort into marketing more expensive chocolates under famous names such as Maxim's and Harrod's.

"We put more emphasis on pricier Valentine chocolates boxes for the special someone in your life," said a saleswoman in Takashimaya's confectionery department. "But even so, those sales didn't make up for the drop in *giri choco* sales."

Whether chasing quantity or quality, even the traditionally buoyant Valentine's period has turned into a massacre for Japan's punch-drunk retailers.

Foreign bank lending to China declines

By Peter Montgomerie and
Rahel Jacob in Hong Kong

International bank lending to China fell sharply in the first three-quarters of last year, well before the collapse of Guangdong International Trust and Investment Company (Gitic) caused broader concerns about the country's credit standing, according to figures compiled by the BIS-based Bank for International Settlements (BIS).

The figures show that, after adjustment for exchange rate changes, credit outstanding to China fell by \$6.8bn in the third quarter of last year compared with a \$3.3bn drop in the second and a small rise in the first quarter. The trend is a sharp reversal of the third quarter of 1997, when lending rose by \$6.2bn.

Some economists, such as Nicholas Lardy of the Brookings Institution in Washington, believe the swing in bank credit is one explanation for the failure of China's reserves to rise last year while it was running a current balance of payments surplus. But bankers in Hong Kong who have studied the details of the BIS figures caution that it is difficult to be sure exactly what lay behind the swing.

Because the BIS produces various sets of figures, some of which are adjusted for exchange rates and some of which exclude lending originating from banks outside the main industrial countries, it is difficult to be sure of the scale of the outflow of credit.

Before exchange rate adjustment, bank credit to China slipped to \$87bn at the end of September last year from \$90bn in December 1997. Bankers assume that this trend has continued through the first quarter of this year, as the extent of the problems at China's non-bank financial companies became apparent.

Some argue that pressure on bank credit flow may add to the temptation for China to devalue its currency, but much depends on what lies behind the fall in credit. One possibility is that Chinese entities chose to switch borrowing from dollars to local currency as interest rates fell by more than 2 percentage points in China last year. Another is that Japanese banks, whose capital adequacy ratios were squeezed by the weakness of the yen, were withdrawing credit.

"It could be a bunching of loan maturities. It could be constraints on the Japanese banking system, but it's striking that it was accelerating before Gitic," said one banker.

Another series of figures produced by the BIS shows lending by Japanese banks to China fell more than \$2bn to \$17.5bn in the first half of last year, making them the largest factor behind a drop of nearly \$4bn to \$68.4bn in lending by banks in industrialised countries.

Afghan factions agree to share power

By Charles Clover in Ashgabat, Turkmenistan

Warring factions in Afghanistan agreed in principle yesterday to set up a broad-based government with a shared executive, legislature and judiciary - a big breakthrough in the country's 19-year civil war. But they did not manage to arrange a ceasefire, which will be discussed along with the composition of a future government in the next series of talks near the end of March.

The decision was announced after three days of negotiating in Ashgabat, Turkmenistan, between representatives of the Taliban, the Islamic fundamentalist militia that has seized 90 per cent of Afghanistan's territory since it became active in 1994, and representatives of the opposition coalition currently led by Ahmed Shah Masood, a legendary ethnic Tajik commander which still holds strategic passes through the Hindu Kush mountains.

Despite repeated attempts at negotiations over several years the two sides have never before agreed to form a shared government.

But many experts consider the decision to be inevitable following the Taliban's capture of the northern opposition's stronghold, the city of Mazar-i-Sharif, last August.

This demonstrated a major step forward on a fundamental issue, said Andrew Tesoriero, the acting head of the United Nations Special Mission to Afghanistan, which helped to bring both sides to the negotiating table.

Pakistan yesterday greeted the deal.

"It's a very good start for finding a negotiated solution to establish durable peace in Afghanistan," said Sartaj Aziz, foreign minister.

Despite the breakthrough, however, the two sides continued fighting in many regions - notably the northern province of Samangan - according to press reports. And both sides have been

making preparations to resume large-scale fighting once the winter snows melt in the mountains.

And despite elaborate displays of politeness by both sides at the press conference yesterday, held in the white marble UN building in Ashgabat, many subtle differences remain apparent.

The opposition representatives, for example, sported neatly trimmed beards. Beard trimming has been outlawed by the strictly religious Taliban, along with

dancing, the education of women, and even kite flying.

The future government, according to Majvi Wakeel Ahmed Mutawakil, the Taliban's lead negotiator, would be "based on Islamic law and Islamic system of government".

According to Mohammed Yunis Qanuni, the spokesman for the opposition, however, the future government would be "based on the respective representation of the different ethnic groups in Afghanistan".

Taiwan warns on Chinese satellites

By Mike Dieke in Taipei

Taiwanese officials have warned that Chinese satellite launches and military modernisation could seriously threaten the island's security and that Taipei must improve its defences, warnings that are likely to heighten controversy in Washington over Sino-US technological co-operation.

Tang Fei, Taiwan's defence minister, said six satellites that Beijing planned to launch next year could improve the accuracy of its ballistic missiles and allow detailed surveillance of Taiwanese defences, giving Beijing a "clear view into our very backyard and bedroom".

A senior official of the Mainland Affairs Council, which guides Taiwan's policy on China, said that it was possible that US companies had given a big boost to Beijing's development of satellite technology and that the island must upgrade its defences.

Other officials said Beijing's ballistic missile deployments were forcing Taiwan toward involvement in a proposed US-led theatre missile defence system (TMD).

The remarks went to the heart of two issues that have helped cause a recent souring of Sino-US relations: China's expansion of its missile forces and the extent to which its development of missile technology has been aided by US companies' use of Chinese rockets to launch their satellites.

Analysts said the Taiwanese military could be hoping to build support for extra defence spending and for involvement in TMD, a project that is of unproven strategic worth but is none the less likely to be extremely expensive.

The remarks may also be calculated to harden pro-Taiwanese sentiment in Washington following reports of an escalation of Chinese missile deployments against the island and accusations that Beijing's agents have stolen US nuclear technology.

A poll released yesterday suggested widespread public support in Taiwan for involvement in TMD, with 85 per cent of those surveyed believing that the government should join such a regional security grouping.

Any Taiwanese involvement in regional missile defence is anathema to China, which considers Taiwan a rebel province and has threatened military

action to prevent it formalising its *de facto* independence.

In his remarks to a weekend conference, the Taiwanese defence minister warned that China's military modernisation posed a growing threat in areas ranging from its development of cruise missiles to the expansion of its capacity to wage computer warfare.

Lin Chong-pin, vice chairman of the Mainland Affairs Council, told reporters there should be more co-operation between Taiwan's government and high-technology industries to counter the threat.

"Taiwan needs to increase its alertness. China can afford to retreat a step, but if we retreat a step, we'll fall into the Pacific Ocean," Mr Lin said.

Satellites that China plans to launch 'could allow detailed surveillance of Taiwanese defences'

action to prevent it formalising its *de facto* independence.

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"Taiwan needs to increase its alertness. China can afford to retreat a step, but if we retreat a step, we'll fall into the Pacific Ocean," Mr Lin said.

Indonesia bank move 'a big breakthrough'

By Sander Thoenes in Jakarta

Indonesia closed 38 banks and nationalised seven more at the weekend in what the International Monetary Fund hailed as a "decisive breakthrough" in reforming the country's banking sector.

After months of backtracking, and amid growing pressure from the IMF and World Bank, officials also approved a government recapitalisation of nine of the largest private banks.

This paved the way for a Rp500,000bn (\$34bn) government bond issue to help recapitalise these banks, along with seven state banks, 14 regional banks and 11 nationalised banks, due in April.

Hubert Neiss, IMF director for Asia-Pacific, said that the highly significant but promised move prepared the ground for an IMF board meeting, at which the Fund would be likely to approve release of another tranche of its \$11.5bn lending package to Indonesia and consider boosting that loan to help fund the country's expected budget deficit in the coming fiscal year.

The government said that 41 banks, an unexpectedly large number, had managed to raise capital independently and join 33 banks which had earlier posted the required minimum capital



Hubert Neiss: move paves way for release of further tranche of IMF lending package

adequacy ratio of 4 per cent or more.

This should take pressure off the funds allotted to recapitalising the private banks.

Bankers doubt, however, that the recapitalisation will be sufficient to restore lending to the real economy. About Rp150,000bn in bonds, issued to state banks, is likely to carry an interest rate of 3 percentage points above inflation while the other half would be at 20 per cent, well below the current interest rate of 37 per cent.

That means the bonds cannot be sold for cash, leaving banks with only interest

income to counter a drain on capital from higher deposit rates than it borrows at. Non-performing loans are now a large part of loan portfolios.

Two banks which had been rumoured to have collapsed were recapitalised and another two were nationalised rather than closed, which leaves owners able to draw funds and drag out the process of repayment of loans to affiliated parties over four years.

Dennis de Tray, country director for the World Bank, insisted the decision on which banks to aid was made by applying normal guidelines.

Other foreign experts involved added, however, that some of these rules were changed to allow for nationalisation of a bank in the Bakrie Group and a bank tied to former president Suharto.

Originally there had been no plans to nationalise banks but the IMF and World Bank agreed to a takeover of banks which had more than 80,000 accounts and large branch networks, ostensibly to limit the disruption of massive closures to the banking sector.

Bankers and advisers suggested this was a compromise to overcome government opposition to closure of more than 17 of the weakest banks.

Israel cabinet confirms claim to all Jerusalem

By Avi Machlis in Jerusalem

Israel fired another shot in a growing dispute with the EU over Jerusalem's status, when the cabinet yesterday reaffirmed Israel's sovereignty over the entire disputed city.

The cabinet said the EU's position that Jerusalem is a "corpus separatum", or separate entity, is legally incorrect and "totally unacceptable to Israel".

Israel would never accept the "division or internationalisation" of the city, it said.

Last week, the EU rejected Israel's request to prevent its diplomats from meeting Palestinian officials in east Jerusalem, which Palestinians hope will become capital of a future state.

Israel captured and annexed east Jerusalem in the 1967 Arab-Israeli war, but its sovereignty has never been recognised by the international community.

Israeli-Palestinian agreements stipulate the city's status is to be determined in permanent status talks between the sides that have yet to begin.

At the weekend, Israel launched an "information campaign" through its diplomatic missions in Europe to try to persuade EU countries of its position on Jerusalem.

Meanwhile, a US official said Israel's policy of expanding Jewish settle-

New industrial zone for Jordan

Israel, Jordan and the US will today in Washington launch a new industrial zone in which joint initiatives will be eligible for duty-free exports to the US, writes Avi Machlis in Jerusalem.

However an ongoing trade dispute and a new dispute over water sharing may sour the atmosphere.

The qualifying industrial zone will be inside Jordan on the border with Israel in the northern Jordan valley. A similar zone already exists in the northern Jordanian city of Irbid.

Despite the co-operation, Jordan has accused Israel of blocking trade, especially to Palestinian-controlled areas of the West Bank. The Palestinian market, worth

about \$2bn, is dominated by Israeli goods, while Jordan says it only exported some \$15m in goods to the Palestinian market.

The issue has been a sticking point in bilateral relations, as many Jordanians feel they have not reaped any economic dividend from their 1994 peace accord with Israel.

Israel says trade has risen from \$32.5m in 1997 to \$42m in the first nine months of 1998. But even most of this trade is from Israel to Jordan.

Further complicating relations, Israel yesterday told Jordan it would immediately reduce the amount of water diverted to Jordan from Israeli sources.

releasing 100 Palestinian political prisoners later this month, a move which could help thaw the frozen peace process. Before Israel from the peace initiative, it angered the Palestinians by releasing mostly criminals when it freed 260 prisoners under the Wye accords.

Israel claims the remainder had "blood on their hands" and were not eligible for release, but Israeli security experts say several hundred imprisoned Palestinians had not been involved in killings.

Israel is also considering

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Israel is also considering

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THE AMERICAS

IADB CONFERENCE HOPES OF BANKS INCREASING EXPOSURES

Brazil confident of return to markets

By Richard Lapper in Paris, Geoff Dyer in São Paulo and Andrew Halls in London

Some of Brazil's creditor banks are confident the country can raise money on the international capital markets before the end of next month. A rapid return to the markets, effectively closed to Brazil since last year, would further bolster confidence in the economy following last week's agreement by banks to maintain trade and interbank credit lines at existing levels until the end of August.

Bill Rhodes, the veteran Citibank debt negotiator who is co-ordinating the effort to help Brazil maintain bank lines, yesterday said: "It is in the realm of probability that Brazil could go back to the market as early as the end of April."

Mr Rhodes is also hopeful that banks will voluntarily increase their exposures if the government makes progress in implementing its new economic programme.

announced last week as part of a revised deal with the International Monetary Fund (IMF). "As people see the economic programme take hold they'll begin to voluntarily increase trade and interbank lines," he said.

The IMF deal - the centrepiece of its \$41.5bn international support package - was originally agreed last October, but the devaluation of the Real in January and a resurgence of inflation made renegotiation necessary.

In Brasília, Luis Fernando Figueiredo, central bank director for monetary policy, said that the agreements with the banks would give us "considerable breathing space on the balance of payments for the next few months". Trade and interbank lines have fallen to about \$25bn compared to between \$40bn and \$50bn in the middle of last year.

International creditor banks verbally agreed to maintain credit lines at existing levels last November, but eventually reduced their exposures as a result of continuing financial instability. Brazilian government representatives were due to meet Japanese banks today, following meetings last week in New York, London, Frankfurt and Paris.

As part of the agreement with the banks, the Brazilian authorities have established a system to monitor bank transactions. Speaking in London on Friday, Arnaldo Fraga, the governor of the central bank, said the Brazilian authorities would disclose aggregate interbank and trade lines.

Mr Fraga declined to comment on individual bank exposure, but said the reception had been positive. "The commitments are firm, but we have to deliver on our side. Providing we do what we have to do on our side, the banks will be there. If we deliver, everything will be fine."

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Brazil credit lines returning, Page 20

Funds hope for power projects

By Richard Lapper

Fresh funds could soon be available for Latin American power, energy and road projects held up since last year because of the financial crisis in emerging markets. Darby Overseas Investments, a Washington-based company set up by Nicholas Brady, the former US Treasury secretary, said this weekend that it was close to making the first investments from a \$500m mezzanine infrastructure fund.

"We'll be open for business pretty soon," said Richard Frank, managing partner at Darby, who said more than \$200m had been raised so far for the fund, originally launched in 1997. "It was all started when the weather was better," said Mr Frank. "Now it's rough, it's all the more important that there are fresh sources of 'dry finance'."

The Andean Development Corporation, a Caracas-based financing institution, yesterday announced the commitment of \$25m in equity and a credit facility for a similar amount. Last December the Inter-American Development Bank (IADB) finalised a 12-year, \$75m loan, while earlier last year Banco Bilbao Vizcaya of Spain and Dresdner Kleinwort Benson, the European investment bank, each committed \$25m in equity. A separate European financial institution is expected to approve a further \$50m commitment to the fund soon.

"We've received requests from over 50 potential clients and 19 projects have been advanced to the due diligence stage," said Mr Frank. Many project developers and companies had been caught in a "difficult position" because their sources of finance had dried up in the wake of debt default in Russia last August, and because of the sharp rise in yields on emerging market debt.

Darby aims to provide mezzanine finance - junior debt which offers a higher return than conventional bonds or loans - to up to 25 projects. Although more equity finance is available through funds such as the Scudder Power Fund, the AIG GE Capital Fund and the Caribbean Power Fund, debt finance is also required because of the long-term character of infrastructure projects.

Separately, Darby is increasing its commitment to medium-sized Latin American companies with the launch of a \$400m investment fund. Its first such fund launched in 1994 has invested \$135m in 11 companies, including two banks.

Recovery in capital flows seen this year

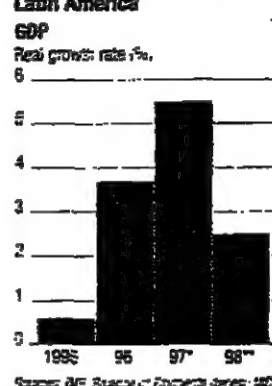
By Richard Lapper

Expansionary monetary policies and low interest rates in Europe, North America and Japan should prompt a recovery this year of capital flows to Latin America and other emerging markets, according to the annual report of the Inter-American Development Bank, published today.

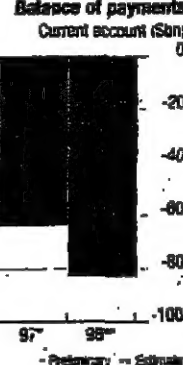
The report, however, warns that "the possibility of new eruptions of instability cannot be dismissed" and says that reduced world economic growth and depressed commodity prices will "pose a major challenge to several countries of the region if macro-economic stability is to be preserved".

Latin American economic growth slowed to an average of 2.5 per cent in 1998, from 5 per cent in 1997, and is widely expected to contract further this year, mainly as a result of recession in Brazil. The IADB report says that in spite of the slowdown, Latin America has maintained a "firm commitment to macroeconomic stability". Across the region fiscal deficits rose by the equivalent of 0.8 per cent of gross domestic product and large exchange rate depreciations were avoided. Inflation averaged only 10 per cent over the region, the

Latin America



Balance of payments



same figure as in 1997. Only two countries - Jamaica and Guyana - contracted in 1998. The report highlights the resilience of commitments to structural reforms in the region in the face of last year's financial crisis. "The response to crisis has entailed a deepening of reforms in order to improve market functioning and modernise the state apparatus," it says. Governments maintained a commitment to economic integration, leaving tariff rates unchanged except for minor adjustments, and increased their efforts to strengthen financial supervision and regulation. Tax reforms, aimed at buttressing weak fiscal positions and eliminating inefficiencies, were initiated in Argentina,

Brazil, Colombia, Ecuador and Mexico. Privatisation continued, although at a more moderate pace than in previous years. Labour and pensions reforms have also remained high on the agenda of a number of countries.

However, GDP per head rose by less than 1 per cent, and when measured as a percentage of GDP per head in the OECD countries fell from 15.4 to 15.2 per cent. The region's total external indebtedness grew by 9.7 per cent to \$696.5bn, even though direct foreign investment accounted for more than half of private capital flows into the region. After increasing by \$26.98bn in 1996 and \$15.57bn in 1997, reserves fell by \$18.98bn.

US steel industry's campaign for quotas strikes a chord among the electorate

Last year, nobody thought the imports bill stood a chance in the House. Now odds are on passage. Nancy Dunne explains why

A vote this week in the US House of Representatives on the imposition of quotas on imports of foreign steel will be the climax to a seven-month industry-union campaign to "stand up" for US steel.

The drive was launched last September at a cost of \$3m-\$4m, when imports were pouring into the country. The deluge of imports left the port of New Orleans unprepared to store it and hot-rolled steel piled up in parking lots after warehouse space proved insufficient.

"No one expected then that quotas had a chance to pass the House," said Don Marshall, spokesman for Senator Jay Rockefeller, West Virginia Democrat.

But it is also coming from "main street Republicans", said Bill Klinefelter of the US Steelworkers union. "These guys go home and take the pulse of their communities. Polls show that people think trade agreements are not working for them."

Even if the legislation does not get through the Senate, its backers believe it will give them leverage to demand other assistance for steel - a change in law to

Meanwhile, campaigners drafted in supporters from all sides of the political spectrum - ranging from Pat Buchanan, the nationalist presidential candidate, to former Congressman Sam Gibbons, a free trade advocate.

To create a sense of urgency, steelworkers, sometimes with their allies in the motor and mechanics unions, staged rallies in 43 US cities.

Three big assemblies in

Washington sent thousands of workers to Capitol Hill to lobby their congressmen. The message was the same: the steel industry would be the first industrial domino to fall. If the US lost its steel industry, what would be next?

"We had to break through a clutter of other issues," said Mr Petruzzello. "The day we announced our [industry-union] coalition, Starr delivered his report to Congress."

Against this tide, free traders have had difficulty making a case against quotas. Daniel Griswold of Cato Institute, a libertarian think tank, argued before the House trade subcommittee that the viability of the domestic industry was not threatened by the increase

make it easier for the industry to win protection against import surges or a steel licensing regime.

The "stand up for steel" campaign was designed and co-ordinated almost like a political campaign, said Michael Petruzzello, US chief executive of Shandwick International, a British public relations company.

Television and print advertising spots informed Americans there was a crisis. A second wave of publicity called on the White House to act. Although the White House resisted calls for quotas, it did agree to speed up anti-dumping investigations against Japan, Brazil and Russia and, after preliminary study, found all three guilty of dumping.

in imports. Imports of steel peaked in the autumn of 1998 and had been declining since, he said.

The US industry had recorded its second highest level of production in the last two decades last year, he said. Eleven out of the top 15 companies made operating profits for the year, as did nine out of 13 in the final quarter.

"The big steel companies and their unions point to the 10,000 jobs that have been lost in the industry in the last year, but that number... [is] relatively small when compared to the 2.5m net new jobs created in the whole US economy in 1998," he said.

But in a glossy pack handed out to journalists, the steelworkers respond with colour charts showing "deeply depressed" levels of capacity utilisation, imports from key Asian countries dramatically above pre-crisis levels, and the import share of the market - 25.2 per cent in January - still above the 23.8 per cent and 23.3 per cent shares in 1997 and 1998 respectively.

The robustness of the US economy did not hurt the campaign, said Mr Marshall. "The crisis stood out in contrast to the rest of the economy." Nor does the contention that quotas would be "illegal" in the World Trade Organisation.

"The only legality I recognise are US laws. No extra-territorial body will tell us what to do," said Mr Klinefelter.



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31364CQ92	6.700%	MTN	08/04/02	100.00	(12.0)
31364FG28	6.000%	MTN	06/20/02	50.00	(10.4)
31364AZN6	6.150%	MTN	07/11/02	175.00	(10.4)
31364BRU3	6.050%	MTN	07/01/02	25.10	(10.4)
31364C2C1	6.410%	MTN	07/08/02	150.00	(10.2)
31364C2M3	6.230%	MTN	07/15/02	200.00	(10.0)
31364C2B6	6.230%	MTN	07/15/02	200.00	(10.0)
31364C3L0	6.250%	MTN	07/22/02	300.00	(9.5)
31364C3W9	6.340%	MTN	07/29/02	200.00	(9.7)
31364C4D7	6.130%	MTN	08/06/02	125.00	(9.8)
31364C4B6	6.220%	MTN	08/12/02	100.00	(9.4)
31364C3J9	6.300%	MTN	08/19/02	100.00	(9.3)
31364C6M5	6.230%	MTN	08/25/02	100.00	(9.1)
31364PCG4	6.090%	MTN	09/30/02	300.00	(8.3)
31364FCV1	6.130%	MTN	10/07/02	100.00	(8.2)
31364FCV2	6.060%	MTN	10/09/02	100.00	(8.1)
31364FDF5	5.900%	MTN	10/10/02	250.00	(8.1)
31364FDB9	5.950%	MTN	10/16/02	300.00	(7.9)
31364FED9	6.170%	MTN	10/21/02	100.00	(7.8)
31364FED9	6.100%	MTN	10/21/02	50.00	(7.8)
31364F2U1	6.080%	MTN	10/29/02	125.00	(7.8)
31364FFB2	6.210%	MTN	10/29/02	200.00	(7.7)
31364CEH7	6.830%	MTN	11/01/02	50.00	(7.6)
31364FFQ9	5.000%	MTN	11/04/02	200.00	(7.5)
31364FFV6	5.890%	MTN	11/06/02	300.00	(7.5)
31364G6W5	7.050%	DEB	11/12/02	300.00	(7.3)
31364FGE5	5.980%	MTN	11/12/02	300.00	(7.3)
31364BNC0	6.090%	MTN	12/02/02	400.00	(6.9)
31364DS04	5.730%	MTN	01/09/03	50.00	(6.1)
31364ANV3	6.000%	MTN	03/01/03	85.00	(6.7)
31364CDD7	6.710%	MTN	05/21/03	200.00	(2.0)
31364AZT2	6.050%	MTN	06/30/03	175.00	(1.1)
31364BR76	6.130%	MTN	07/10/03	25.10	(1.1)
31364CAB2	5.450%	DEB	5/01/00	60.00	1.8
31364CMB1	6.840%	DEB	10/15/00	50.00	1.3
31364CAK1	5.800%	DEB	12/10/00	750.00	2.5
31364CAP0	6.850%	DEB	04/06/04	400.00	2.7
31364CL20	6.970%	MTN	04/08/04	50.00	2.7
31364CMT7	6.740%	MTN	04/10/04	100.00	2.7
31364CQ43	6.730%	MTN	06/03/04	100.00	3.4
31364CW38	6.480%	MTN	06/28/04	200.00	3.8
31364AJT6	6.620%	MTN	08/30/04	25.00	3.8
31364CAT2	7.400%	GLB	07/01/04	1,600.00	4.1
31364C220	6.360%	MTN	07/15/04	100.00	4.6
31364FCR5	6.210%	MTN	10/01/04	150.00	7.0
31364C5A2	6.310%	MTN	11/01/04	50.00	7.4
31364CB28	7.875%	GLB	02/24/05	500.00	7.9
31364BAL4	7.450%	MTN	03/02/05	75.00	10.0
31364CBH7	7.650%	DEB	03/10/05	400.00	10.1
31364BAV2	7.350%	MTN	03/28/05	150.00	10.3
31364BBD1	7.375%	MTN	03/28/05	250.00	10.3
31364BCT5	7.150%	MTN	05/11/05	100.00	11.9
31364CBN4	6.350%	DEB	05/10/05	400.00	12.3
31364BED8	6.630%	MTN	06/20/05	50.00	12.4
31364BEC2	6.440%	MTN	06/21/05	150.00	12.6
31364AMT8	6.900%	MTN	06/28/05	10.00	12.6
31364BGT9	6.730%	MTN	08/01/05	150.00	13.0
31364BHT9	6.850%	MTN	09/22/05	150.00	13.3
31364BJE1	6.820%	MTN	09/23/05	200.00	13.8
31364BM24	6.770%	MTN	09/30/05	100.00	13.4
31364CBU8	6.550%	GLB	09/12/05	500.00	12.5
31364BLE4	6.400%	MTN	09/27/05	200.00	13.7
31364BLT4	6.540%	MTN	10/03/05	200.00	13.8
31364BQW3	6.140%	MTN	11/23/05	100.00	14.6
31364CCD5	5.940%	MTN	12/01/05	300.00	14.7
31364BVS6	5.875%	GLB	02/02/06	1,000.00	13.4
31364BVS6	5.875%	MTN	02/14/06	100.00	15.6
31364BWM8	5.800%	MTN	02/22/06	200.00	15.7
31364BYT1	6.410%	MTN	03/08/06	100.00	15.9
31364BYT9	6.220%	MTN	03/13/06	200.00	15.9
31364BZK1	6.625%	MTN	03/21/06	150.00	16.0

*"MTN" means Medium-Term Notes issued under the Fannie Mae Medium-Term Note Facility; "DEB" means Debentures issued by Fannie Mae either under the Fannie Mae Global Debt Facility; "GLB" means Debentures issued under the Fannie Mae Global Debt Facility.

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*"Benchmark Notes" is a service mark of Fannie Mae.

The Dealer Managers for the Exchange Offer are:

Goldman, Sachs & Co.

85 Broad Street, 29th Floor
New York, New York 10004
Telephone: (800-1-877) 510-9071 (toll-free)
Overseas tel.: (00-1-212) 357-1391 (collect)

The Information Agent for the Exchange Offer is:

D. F. King & Co., Inc.

77 Water Street
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(00-1-212) 269-5550

March 12, 1999

This announcement has been approved for issue in the United Kingdom by Goldman Sachs International, which is regulated by the Securities and Futures Authority.

BRITAIN

Infiltration of Lloyd's by crime syndicates 'foiled'

By Andrew Bolger,
Insurance Correspondent

Lloyd's last night said attempts by US crime syndicates to infiltrate the London-based international insurance market had been foiled, following one of the UK's biggest financial fraud inquiries in recent years.

Several British brokers' firms have been raided in an Anglo-American investigation into an alleged multi-million pound swindle involving organised crime and a number of reinsurance companies, some registered offshore in the Caribbean.

David Gittings, Lloyd's director of regulation, said: "There is no evidence that American crime syndicates have infiltrated the market: indeed the timely action by

authorities in the US and UK and ourselves has prevented this happening. It is not anticipated there will be any losses sustained by Lloyd's arising from this fraud, which has been stopped at an early stage."

The fraud is thought to involve bogus US insurance companies that offer to cover aviation and shipping companies and Third World governments against losses from natural disasters, air crashes and shipwrecks.

Police are investigating claims that the fake companies rent property and other assets from legitimate companies in order to give the appearance they have the resources to pay off multi-million pound claims. Premiums are collected, but when a large claim surfaces,

the bogus company is liquidated, leaving the client unprotected.

Detective-Superintendent Ken Farrow, head of the City of London fraud squad, said: "Over the past 10 years there have been several instances of major catastrophes, where claims have not been fully settled because the rented assets could not be used to cover claims."

No charges have been brought as a result of inquiries led by 50 detectives from the City fraud squad involving officers from the Kent, Norfolk and Suffolk forces. They have studied thousands of documents at Lloyd's. The raids were the culmination of a four-month investigation, Operation Chain, involving the US Internal Revenue Service,

City of London police and regulators at Lloyd's and the Financial Services Authority.

Lloyd's said: "We believe that it is the false use of Lloyd's security, as an insurer which is being investigated. It is apparently a third-party fronting operation. It is the policyholders who would have suffered any losses."

As far as we are concerned, no Lloyd's underwriters are in line for charges, but until the City fraud squad actually makes charges and lays evidence, we don't know."

Neither Lloyd's nor the City police would quantify the scale of the possible fraud, which one report suggested could exceed \$100m (£16m).

Ramblers step out on new path to rural controversy

Proposals to expand the 'right to roam' please walkers but anger farmers and landowners, says Deborah Hargreaves

Walking in the countryside for leisure is a great British pastime which sees the inhabitants of towns fleeing at weekends to march along the footpaths of rural England. Many leisure tracks through woods and fields are open to the public today because they were established as local communication routes for farmers and villagers centuries ago.

But farmers and landowners do not always relish the prospect of ramblers tramping their pastures and have responded angrily to government proposals that would extend the right to roam over an additional 1.2m hectares of countryside in England and Wales. Scotland has separate access laws.

"There is no right as yet; these are just proposals. But we're worried people will think they can now go where they like," said the Country Landowners Association, which represents farmers and owners of country estates including the aristocratic proprietors of some of the nation's finest landscapes.

"Farmers in Cumbria [north-west England] and Wales are particularly vulnerable because lambing has started," an official said.

"Ramblers' groups have been pushing for wider access to the countryside for many years. Walkers are currently entitled to roam across nearly 2m hectares of national parks that were created in 1949 for environmental and recreational purposes. The parks are generally areas of outstanding natural beauty, but can include towns and villages.



Green and pleasant land: set for a battle over access

Planning rules in these areas are very strict and development is kept to a minimum. In addition, there are 340,000km of footpaths, often across land owned by the National Trust, the 100-year-old charity dedicated to preserving Britain's landscape and heritage.

For example, the National Trust maintains the coastal footpath that runs round

most of the country. Footpaths are often historic rights of way and need to have been in use for at least 20 years to be sacrosanct. Some landowners open up paths on their land voluntarily or agree on access to their fields, but others object to paths going across their land.

The Ramblers Association, a walkers' pressure group, recently took one wealthy estate owner to court for blocking a footpath with metal barriers and barbed wire.

"Almost a quarter of Britain's priceless network of rights of way are blocked or impassable at the moment," the association says.

The new proposals would open up areas of wild countryside to walkers. The 1.2m hectares proposed consists of land classed as mountain, moor, heath and downland covering 8 per cent of England and Wales.

The proposals also include common land, which is enshrined in ancient statutes and covers 3 per cent of England and 8 per cent of Wales.

Ramblers would not be allowed access to private gardens, golf courses, land under development, railways or cultivated land - even when it is ploughed up in winter. Landowners would also be able to close their land for up to 28 days a year.

The government says the land to be opened would have to be mapped first and local agreements put in place. Ramblers fear this could take too long.

"We are very pleased with the principle of opening up this land, but concerned about the timescale for implementing it," says Nicky Warden of the ramblers' group.

Clinton and Adams to meet on N Ireland arms deadlock

By John Murray Brown
in Dublin and Gaetan Malkin
in Washington

Gerry Adams, the Sinn Féin president, has been called to a hastily arranged breakfast meeting with President Bill Clinton, as the US administration signalled a growing involvement in brokering an end to the dispute threatening Northern Ireland's Good Friday peace agreement.

Mr Adams has been forced to pull out of a St Patrick's Day event in Georgia to meet with Mr Clinton on Wednesday ahead of the main White House reception for unionist and nationalist politicians. The move has

added to speculation that Mr Clinton may use Wednesday's St Patrick's Day reception to press Sinn Féin to make a gesture on arms to allow progress to be made on implementing the peace accord.

This week's events have taken on an added importance with the UK government's decision to postpone the devolution of powers to the new power-sharing assembly until the week beginning March 29.

Sinn Féin took an advertisement in The New York Times last week to castigate David Trimble, his Ulster Unionist opponent and the province's first minister for

"pushing the peace process to the brink".

Mr Trimble in turn used The Washington Post to launch a counter blast against Sinn Féin.

Mr Mowlem, the Northern Ireland secretary - writing in yesterday's Independent on Sunday newspaper - said the Washington meetings could "serve to lessen their distrust in each other and help build the confidence necessary to work together".

Mr Trimble said: "Most of us will be in Washington next week and there may be some useful meetings with the US administration."

Editorial Comment, Page 15

Parties clash on Scottish tax plan

By Brian Groom
in Edinburgh

The war of "Scotland's penny" was under way with a vengeance yesterday as party leaders traded accusations over the Scottish National party's proposal to spur chancellor of the Exchequer Gordon Brown's 1p income tax cut and spend the money on health, education and housing.

The pro-independence SNP seized on an admission by Donald Dewar, the Scottish secretary, that he would be prepared to use the Scottish parliament's tax power "at

the right time and when it is necessary".

But an opinion poll taken after last week's Budget, and published yesterday, showed the SNP trailing Labour by 15 points - a gap the party must close if it is to stop Labour coming out on top in the first election to the Scottish parliament on May 6.

All sides see the SNP's high-risk decision to invoke the parliament's power to vary the basic rate by up to 3p as the defining moment in the election, although formal campaigning has yet to start.

The SNP's plan to keep the basic rate at 23p for four years was endorsed overwhelmingly at the party's conference in Aberdeen on Saturday, but some senior figures privately are deeply worried.

"They fear it will penalise the well off, alienate rural voters who already face higher petrol costs, and distract attention from the independence case. Right-wingers fear it is a cross-section of the Rubicon to a high-tax policy."

Mr Dewar admitted Labour might use the power "if the situation justified it, but not when we are allocating £4bn (£6.4m), in addition, in the next three years, to public spending". Mr Salmond said: "The basic services are under pressure now". He believed "the vast majority of people in Scotland would rather have more invested in education, health and housing than a penny bribe from the chancellor of the Exchequer".

Apart from the SNP, the Scottish Liberal Democrats are prepared to raise 1p income tax for education.

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DIVIDEND & INTEREST PAYMENTS

TODAY

Abbey National Treasury
7 1/4% Gtd Nts 2001 £71.25
Aeroquip-Vickers £0.22
Ashanti Cap 5 1/4% Exch Gtd
Nts Mar 29/00 \$27.50
Atlantic Richfield \$0.7125
Brunswick \$0.125
CSX \$0.30
Canadian General Invs
C\$0.075
Cargill 9 1/4% Bd Mar 2016
\$92.50
Dana \$0.31
Dover \$0.105
GHQB 12 1/4% Gtd Sec Bd
2015 £126.25
Honeywell \$0.29
Kelsey Inds 21p
Midland Bank Non-Cm \$ Pf
Ser A1 \$0.355
Do Non-Cm N/Vtg \$ Pf Ser
A2 \$0.08875
Do Non-Cm \$ Pf Ser B1
\$0.41
Do Non-Cm N/Vtg \$ Pf Ser
B2 \$0.1025
Morrison (Wm) 5 1/4% Cm Rd
Pf 2.825p
Newcastle Bldg Scty 12 1/4%
Perm Int Brg £83.125
NTT Data 3.3% Bd 1999
Y330000.0
PennEnergy \$0.0825
Quebec 12 1/4% Ln 2020
\$2.125
Santander Fin Iss Sb Gtd
FRN 2004 \$302.64

Seagram \$0.185
Sweden 9 1/4% Ln 2014
£487.50
Thomson \$0.1625
TRW \$0.33

TOMORROW

Honda Motor 3.8% Bd 2001
Y380000.0
Limited Inc \$0.15
NKK 5.3% Bd 1999
Y530000.0
Do 5.4% Bd 2000
Y540000.0
Santander Fin Iss Und Var
Rate Nts \$3882.81

WEDNESDAY

MARCH 17

Chase Manhattan Sb FRN
2009 \$134.38
Christiania Bank Sb FRN
2001 \$270.24
Export-Import Bank of Japan
9 1/4% Gtd Bd 1999 \$475.0
HK&Sh Bldg Crp Prim Cap
Undated Fl rate Nts (2nd
Series) US\$88.75
Nippon Light Metals 5.8%
Bd 2000 Y580000.0
Welsh Water Utilities Fin
7 1/4% Gtd Bd 2004 £71.25

THURSDAY

MARCH 18

Abbey National Treasury

6 1/4% Gtd Nts 2002 \$63.75
Albion 2.5p
BPI Cap Fin Ser A FRN N/
Vtg Pf \$0.45
BTM Fin (Curacao) 7 1/4%
Gtd Bd 2006 \$71250.0
Helton IR3p
Japan Airlines 5.8% Bd
2003 Y560000.0
Rank Fin 7 1/4% Gtd Bd Mar
2008 £72.50
Scottish Eastern Inv Tst
0.88p
Stagecoach 1p
Sumitomo Chemical 6.4%
Bd 1999 Y640000.0
Sumitomo Realty 6.15% Nts
1999 Y615000.0
Do 6.2% Nts 2000
Y620000.0

FRIDAY MARCH 19

American Int \$0.058
Anglo American Corp of
South Africa R2.75
BPI Cap Fin Ser B Step-up
FRN N/Vtg Pf \$0.39
Birmingham Midshires Bldg
Scty FRN 2000 £155.15
Foreign & Colonial Inc Grwth
Inv Tst 0.2p
Foxters Brewing AS\$0.055
Gold Fields R0.50
Henderson Smaller Co's Inv
Tst 1.5p
NT & T 10 1/4% Bd 2001
CS102.50
Taisel 3.8% Bd 2001
Y380000.0
Vodafone 7 1/4% Nts 2004
£75.0

UK COMPANIES

TODAY

COMPANY MEETINGS:
Enviromed, 82,
Thredneedle Street, E.C.,
10.00
Highland Timber, 30,
Lombard Street, E.C., 12.00
BOARD MEETINGS:
ASW
Bovis Homes
Burford
Enstone
Eurotunnel
Fairley
Glenbia
Infobank Int
Laporte
Linden
NSB Retail Systems
Natural Building Materials
Ruberoid
Sharpe & Fisher
Spirax-Sarco
Ugland Int
Wellington
Interims:
Benchmark
Jordan
Superscape VR

TOMORROW

COMPANY MEETINGS:
Sharr, Marriott Hotel, W., 12.00
Grosvener Square, W., 12.00
BOARD MEETINGS:
Brixton Estate

Hall, Vincent Square, S.W.,
7.00
BOARD MEETINGS:
Finale:
Bodycote
Brammer
Capital Corp
Charter
Computacenter
Derwent Valley
Energie
Financial Objects
Finlay (James)
Global
Headlam
MTL Instruments
Metatrax
Newey
Presbury
Secure Test Banking
Simon
Tarmac
TeleWest Comms
Tudor
Wood (Arthur) Interims:
Cortec
Dorling Kindersley

WEDNESDAY

MARCH 17

COMPANY MEETINGS:
Rights & Issues Inv Tst, 25,
City Road, E.C., 12.00
Safestore, 118, Priory Road,
N., 10.30
BOARD MEETINGS:
Finale:
Brixton Estate

Clydeport
DCS
Devro
Gibbs & Dandy
Hepworth
Oriflame
Xaar
Interims:
Kier
Sindar
Smiths Inds

THURSDAY

MARCH 18

COMPANY MEETINGS:
Asset Management Inv Co,
32, Ludgate Hill, E.C., 12.00
Brunner Inv Tst, 20,
Fenchurch Street, E.C.,
12.45
Domino Printing Sciences,
Trafalgar Way, Bar Hill,
Cambridge, 11.00
Lorhio, Town Hall, Horton
Street, Kensington, W.,
11.00
Securicor, Ironmongers Hall,
Barbican, E.C., 11.00
Shires Smaller Co's, Trinity
House, Tower Hill, E.C.,
12.00
BOARD MEETINGS:
Finale:
Churchill China
Cobham
Dialog
Dinadim Inc Grwth Inv Tst
Fisher (James)

Geest
Hanover Int
Kwik-Fit
Laird (John)
MDS
McAlpine (Alfred) Mithras
Inv
Morrison (Wm)
National Express
Trinity
Interims:
Thorpe (FW)
Town Centre Sec

FRIDAY MARCH 19

BOARD MEETINGS:
Finale:
British Telecom
Interim:
Fortnum & Mason

Company meetings are
annual general meetings
unless otherwise stated.

Please note: Reports and
accounts are not normally
available until approximately
six weeks after the board
meeting to approve the
preliminary results.

This list is not necessarily
comprehensive since
companies are no longer
obliged to notify the Stock
Exchange of imminent
announcements.

CONFERENCES, VENUES AND COURSES

CONFERENCES

MARCH 18 & 19
FT European Pensions
Distinguished speakers include:
Professor Mark Wolf, Member of
European Commission; Mr Ken van
Rees, Managing Director Shell Pensions
Fund, Chairman, European Federation
of Retirement Providers; Mr Martin
Jack, Director of IBM Retirement
Funds, EMEA; IBM UK Ltd; Mr Bruce
Gunter, Head of Pensions, BP Amoco
UK; and Mark Goldsmith, Head of
Pensions, Linde & Alliance.
Contact: Monique Arkesztajn
FT Conferences
Tel: +44 171 873 3375
Fax: +44 171 873 3067
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BRUSSELS

MARCH 24
Canning House Conference -
Brazil: Current Economic and
Political Outlook
Following recent economic events in
Brazil, the conference will seek to analyse
the consequences, internal and external
for Brazil's financial progress. High level
British and Brazilian speakers include: ex
Brazilian Trade & Industry Minister,
Antonio Reis, Schrodes, Temescheide,
Banco Parana, Banco BNB, Vercopa,
Petrobras, Noto Autopecas.
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Tel: +44 171 235 2303
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MARCH 30 & 31
Central & Eastern European
Power Industry Forum
High-level forum for ministry officials,
utilities, advisors, investors analyzes
gas and electricity sector co-operation,
project financing, privatization,
investment.
"Energy Regulation and Energy Trade"
Pre-Conference Seminar March 29.
Venue: Sheraton Hotel
Contact: PennWell Publishing UK C&E
Tel: +44 1708 342222
Fax: +44 1708 379344
e-mail: pennwell@compuserve.com
Warsaw, POLAND

April 19-21
Swag Markets Analysis
Essential for swaps, fixed income
participants and risk managers,
this programme provides
comprehensive explanations of
trading, hedging, arbitrage as well
as structures, pricing and use in
synthetic and new issues.
Contact: Mike Lewis,
City University Business
School
Tel: 0171 477 8710
Fax: 0171 477 8882
Email: m.lewis@city.ac.uk
Internet: www.city.ac.uk/cuba/ed/
LONDON

April 21-23
Financial Analysts Seminar -
Europe
Considering the new risks and
opportunities in European markets
and the rapid pace of change in
global investing, investment
professionals in Europe need to be
armed with the most current
tools in their search for superior
performance. This conference will
address core investment topics
from a regional and global
perspective.
Contact: AIMR in the USA
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Fax: 1-800-980-3634
Internet: www.aimr.org
Madrid, Spain

MAY 4 & 5
NGERIA - Debt, Development
and Democracy: Prospects
and Challenges
A two day conference following the
Nigerian President's election to
review the new political landscape and
the framework for economic recovery.
The conference will bring together a
number of senior ministers, international
analysts and key strategic players in
Nigerian investment.
Contact: Monique Arkesztajn
FT Conferences
Tel: +44 171 873 3375
Fax: +44 171 873 3067
Email: monique.arkesztajn@FT.com
LONDON

MARCH 22 - 26
Corporate Credit Analysis -
Banking & Finance Courses
A Division of Hyperion
Training Limited
An introductory course aimed at those
with little or no experience of credit
analysis. The course covers the credit
process, financial reporting, financial
analysis and interpretation, cashflow
and liquidity, security, and the lending
process. Discounts available.
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APRIL 12-14
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Share Buy Backs • Share Valuation
• Cashflow Statements • Profitability,
Liquidity and Solvency Ratios
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Email: waghornb@birtch.com
Internet: http://www.birtchtraining.com
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Conferences, Venues & Courses

To celebrate the transition of
Administration in Macau and in
the follow up to Macau's accession
to the International Monetary Fund's
article IV consultation process and to
the Bank of International Settlements.

Friday, 14th May
Key Note Addresses

SUSTAINABILITY OF MONETARY
AND EXCHANGE RATE POLICIES

Chaired by Vitor Pereira
Secretary for Economic Coordination

Da Xianglong-Governor
People's Bank of China (expected)

Antonio de Sousa-Governor
Bank of Portugal & Governing Council, ECB

Joseph Yam Chi-Kwong-Chief Executive
Hong Kong Monetary Authority

Edward A. J. George-Governor
Bank of England

Shemitsu Sugisaki-Deputy Managing Director
International Monetary Fund

SOUNDNESS OF FINANCIAL SYSTEMS

Chaired by Maria Mameleia-Morgado-
Chairwoman
Monetary and Foreign Exchange Authority of Macau

Garriel Singson-Governor
Bank of the Philippines

M. Chatur Mongkol Sornkiet-Governor
Bank of Thailand

Sakuya Fujiwara-Deputy Governor
Bank of Japan

Gunter D. Baer-Secretary General
Baptist International Settlements

CONCLUDING REMARKS

Maria Mameleia Morgado-Chairwoman
Monetary and Foreign Exchange Authority of Macau

Saturday, 15th May
Open Technical Sessions

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Venue

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31st March, 1999 - Abstracts of no more than 500 words.
26th April, 1999 - Notification of selected authors.
26th April, 1999 - Submission of full paper.

Selected authors will be sponsored (accommodation and registration fees) to
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Lipman, GlaxoSmithKline; Dr Andrew
H. Wild, Warner-Lambert Company;
Professor Dr Hoot Meyer, Bayer AG; Mr
Henry Wosk, Univ. of Dordrecht; Lufkin
Jettette Merchants Banking; Mr Bill
Horvitz, Teva Pharmaceutical Industries
Ltd; Mr Giles Pajot, IMS HEALTH.
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April 25 - 28

Marketing in Latin America in
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Media and Advertising • Quality of
Opinion Polls in Latin America
• Segmentation in e-commerce and
culturally diverse markets • Customer
Satisfaction case studies
Key speakers: Pedro Chiharro,
Banco Santander, Kathleen
Frankovics, CIBC, Fernando
Espinoza, Sternmedia Network.
Venue: Sheraton Hotel Santiago, Chile
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Opinion and Marketing Research)
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April 25 - 28

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April 25 - 28

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INSIDE TRACK

PROFILE PAUL AND ANDRÉ DESMARAIS, CHAIRMAN AND PRESIDENT OF POWER CORPORATION, CANADA

Dealing in dynasties

Despite its old-fashioned approach, the family-run conglomerate is one of Canada's most successful companies, writes Edward Alden

Power Corporation of Canada is that deeply unfashionable thing: a diversified holding run by two brothers in an age where both conglomerates and family-run businesses are out of favour.

Perhaps it is the exception that proves the rule. In Canada, where it has big insurance and mutual fund interests, Power Corp is often held up as a metaphor for the nation: its impact has been far out of proportion to its size, yet it is reluctant to boast of its accomplishments.

Paul Desmarais Sr acquired the holding company in 1968, and through a series of acquisitions and well-timed sales, market capitalisation grew from C\$61m (€25.4m) to nearly C\$85bn today. It is one of the largest corporations in Canada, with assets of more than C\$120bn under its control in Europe, China and North America.

The only hint of the role played by Mr Desmarais Sr in opening China to Canadian investment is in the intimate dining room at Power Corp's headquarters in Montreal, where original prints from a 17th-century Chinese manuscript adorn the walls.

The prints were a gift from Bo Yibo, one of the "immortals" from China's Long March, and Chairman Mao's head of economic planning. Mr Bo spent a week at the Desmarais country estate near Quebec City in 1973, after falling ill on his way to Washington to brief Richard Nixon before his historic trip to China. Mr Nixon's visit is usually thought to have opened up diplomatic and commercial relations between China and the west. But

before the US president set foot in Beijing, Pierre Trudeau, Canada's then premier, had already travelled to China. A few years later, Mr Desmarais, a legendary deal-maker, headed Canada's first trade delegation there.

The Desmarais clan is even more influential in national politics. After a separatist government first came to power in Quebec in 1976, Power Corp halted new investments in the province and strengthened its ties with the Quebec federalists who dominate the Canadian government.

No other Canadian company enjoys closer relations with the Liberal government of Prime Minister Jean Chrétien. Paul Martin, finance minister, made his fortune at Power Corp, and John Rae, Mr Chrétien's campaign manager, is among the company's top executives. In addition, André, one of Mr Desmarais's sons, is married to Mr Chrétien's daughter France.

Mr Desmarais Sr, now 78, handed over the day-to-day running of the company to his sons three years ago. Paul Desmarais Jr, 44, and André, 42, became chairman and president respectively, and are co-chief executives. Their father, however, remains a significant influence behind the scenes. He still controls a majority of Power Corp's voting shares.

The challenge for Paul and André has been to keep shareholders happy with the company's complex holding structure and diverse portfolio of investments at a time when many investors want pure plays.

In Europe, where Power Corp began investing in the 1980s,

investments are being pared down to four sectors: broadcasting, specialty minerals, utilities and oil.

Pargesa, a Swiss subsidiary jointly owned with Albert Frère, the Belgian financier, has acquired a 50 per cent stake in CLT-UPA, one of Europe's biggest broadcasting companies. It owns a majority of the French specialty minerals giant Imetal, which bought the UK-based English China Clays for £758m earlier this year.

Pargesa is also a big share-

The brothers do not seem inclined to change their father's winning strategy

holder in the French utility Suez Lyonnaise des Eaux, and in TotalFina, the oil merger between Total of France and Belgium's Petrolina.

With no debt and C\$3m in cash, Paul and André say they are eyeing further acquisitions in Europe. Since taking the top jobs, the brothers have begun to put their mark on the company. In 1997, they engineered the C\$2.9bn takeover of London Life, one of only two publicly quoted insurance companies in Canada, stealing the prize away from Royal Bank, the rival bidder. Canada and the US generate most of Power Corp's earnings

through majority-owned subsidiaries Great-West Life, Canada's largest insurance group, and Investors Group, the largest mutual fund company.

The Desmarais approach is deceptively old-fashioned: the brothers buy large blocks in companies they think have excellent long-term growth prospects. Power Corp is an "active shareholder", says Paul Desmarais Jr: it chooses or influences the choice of top managers and shapes the strategic decisions of the companies it holds. The formula, he says, has produced steady returns with relatively low risk - compounded annual earnings have grown by 15 per cent a year over the past five years.

In addition to their investment philosophy is the Desmarais approach to business relationships, epitomised by the alliance with the Frère Group. The brothers believe in finding strong local partners and nurturing the relationship.

André Desmarais says: "An important thing for any family-controlled company is to be able to work through partnerships, because every culture is different. There are always things you have to learn and having partners is very helpful."

The search for the right partner in China partly explains why Power Corp took so long to invest there. While Power Corp has cultivated ties with top Chinese officials since the 1970s, it studied and rejected several investment opportunities before deciding last year on a joint venture with Bombardier and China's National Rail Company to build mass transit railcars in Qingdao.

André Desmarais says it took a long time to understand how to do business in China, but that patience has brought its rewards.

In Europe, Paul Desmarais Jr says the company has benefited immensely from its familiarity in both French and English-speaking cultures.

"In Canada we are bilingual, but more than bilingual, really bicultural, at ease with our British heritage and our French heritage," he says.

The brothers do not seem inclined to change their father's winning strategy, yet they are conscious that the record of family dynasties in Canada is dismal. Eaton's, once Canada's



most successful department store chain, was driven to bankruptcy by the incompetence of Eaton heirs. The Southams, once the country's most powerful newspaper family, were bought out in 1996 by Conrad Black. And Edgar Bronfman, heir to the Seagram fortune, has been criticised for gambling his profitable liquor business on high-risk film and recording companies.

Paul and André will have to prove they have inherited their father's sense of timing - Mr Desmarais Sr sold his pulp and paper company, Consolidated-Bathurst, for a 50 per cent premium in 1988, just before the pulp market soured. And he disposed of Montreal

Trust the same year, shortly before the entire trust industry collapsed in Canada.

Power Corp, like most holding companies, continues to trade at a discount to its underlying assets, reflecting shareholders' desire for more focused investments. Paul Desmarais Jr is sanguine, noting that the stock was briefly at a premium six months ago.

"We take a long-term view of this. If you're a long-term shareholder of Power Corp, do you really care? You will think about whether this company has sustainable earnings and sustainable franchise positions."

André Desmarais says the best insurance against a failed succession has been the careful

way he and his brother have been eased into their jobs.

"This transition has been going on for a long time and the amount of responsibility given up by my father took a lot of courage," he says.

Paul and André concede that as long as their father remains the controlling shareholder, people will continue to believe he still calls the shots.

Paul Jr is good-humoured about his father being given credit for the London life deal, even though he was then recovering from a heart operation. "My father joked: 'You know Paul, when I'm in heaven I'll still be doing the deal.' And you know something, he probably will."

Essential Guide to Paul and André Desmarais

Groomed for the job: after education at McGill University in Montreal and the European Institute of Business Administration in France, Paul Jr became director of planning for Power in 1981, a vice-president in 1982, and chief operating officer in 1986. André was educated at Concordia in Montreal, became executive assistant to the chairman in 1981 and headed several Power subsidiaries before taking over from his brother as chief

operating officer in 1991. Family connections: the alliance between Power and the Belgian Frère Group, which formally extends to 2014, is cemented by more than just business interests. Albert Frère's son Gerald, heir to the Frère family empire, is a godfather to one of Paul Jr's children. André is married to Chrétien's daughter France. ("I knew when I married her 17 years ago that he would become prime minister," he quips.)

Sibling rivalry: most power sharing among chief executives falls on the sword of personal ambition, and brothers could be expected to cross swords more than usual. While the two are remarkably amicable, Paul Jr acknowledges that "the emotion factor is exponential" in a family company. But he says they have found a clever solution. André handles the China business and Paul is focused on Europe, so they rarely see each other.



LUCY KELLAWAY

Scary truth about laughter

You laugh automatically when the Queen makes a feeble pleasantry. And it's the same thing when your boss makes a joke at work

How much do you laugh at work? I bet you'll say you don't laugh much. Work, after all, is not particularly funny. Indeed, the sight of a few colleagues wearing those idiotic red noses on Friday was enough to remind most sensible people just how unfunny work really is.

But if someone actually measured how often you laugh in the office, you might be surprised. We laugh a lot more often than we think we do. Laughter at work has precious little to do with being amusing, with joking, or with fun of any sort. It has everything to do with office politics. Which is to say it is all about power.

Think of the Royal Family. These unfunny, uptight people actually make people laugh more easily than the professional comedians Rory Bremner and Dawn French put together. The Queen only has to make the laziest pleasantry on an official visit and everyone convulses. They laugh not because they are remotely amused but because they are nervous. She is more powerful than they are.

The same thing happens every day in offices everywhere. When your boss makes a joke, you laugh without thinking. The more senior and the more scary the boss, the greater your mirth. It is not that you are a sycophant, it is that you understand the system.

Making a joke yourself is a much riskier matter, as I have

often found. You listen to your seniors' jokes and falsely conclude that general jocularity is welcomed. You make a joke. Everyone ignores it. Disaster. The role played by jokes in the pecking order seems not to be understood by the communications experts, who generally advise the more the merrier. They will tell you the problem with most offices is that there is not enough laughter in them. There is a whole training industry that makes good money out of laughter workshops.

But the truth is otherwise. Consider an evening recently endured by managers of a leading retailing group who were being introduced to their new chief executive. After the meal, he suggested everyone should tell a joke. Far from being a cheery bonding session, this turned into an exercise in divisiveness: some jokes got big laughs, others fell humiliatedly flat.

We need to understand "humour" better at work. The flatter the hierarchy, the more complicated things are. A good rule of thumb is that if people listen to you and laugh at your jokes, you are going somewhere. If not, then you're not.

I am all in favour of employee share ownership. I have owned Pearson shares for many years and can think of not a single bad thing to say about the

experience. Quite simply, I have got richer and richer and richer. Hard to argue with that.

In last week's Budget, Gordon Brown tinkered with the rules to make it easier for companies to offer shares to their employees. Everyone agrees this is a good thing. To own shares is meant to motivate you. It is meant to make you feel better about your employer. It is meant to destroy that "us and them" feeling.

But I suspect this is wrong: owning shares makes employees feel good only when prices are going up. The market has been rising for so long - 17 years, more or less - that few of us can remember what it felt like before. It is a fantasy to think that

owning shares in your company motivates you. What it does is turn you into a financial

speculator who looks up their shares in the newspaper.

For employees with no other savings, best advice would be to trade the shares in your company for those in another; to have your salary and your savings coming out of the same basket does not make financial sense at all.

I've got an exclusive. It is the latest theory on corporate strategy from McKinsey. I hope you'll agree it's a cracker. Here it is: "The best strategy for any company is a strategy it can implement."

That is the summary of an article in the brand new McKinsey Quarterly. Having come up with this startling view, the consultant has subjected it to a thorough McKinsey testing. Companies across a wide range of industries have been picked on, and complicated tests run to see whether the theory stands up. And guess what? It does! Strategies that companies are unable to implement turn out not to work!

That is not all. Companies dreaming up strategies do better if they have given some thought to the things they do well. That theory turns out to stand up, too. And here is a theory of mine: good strategies are better than bad ones. I wonder if McKinsey would like to test that?

lucy.kellaway@FT.com

THE CHAIRMAN HAS HAD AN AMUSING THOUGHT. THERE WILL BE A SHORT BREAK FOR RESPECTFUL LAUGHTER.

BUSINESS TRAVEL TURKMENISTAN

A transformation just waiting to happen

Stewart Dalby visits a country which has yet to fulfil its dream of becoming the new Kuwait

Not long after Turkmenistan gained independence from the Soviet Union, Saparmurat Niyazov, president, declared that within 10 years the largely desert country of 4m people would be the new Kuwait.

However, things did not work out quite like that. Berzengy, a development in the desert outside Ashgabat, the capital, is testament to his misplaced optimism. Berzengy is known locally as Las Vegas because of its strip of 21 hotels, all with casinos and office blocks.

The hotels were built to accommodate the anticipated flood of western investors, but they have been left housing two or three guests at most.

The Soviet Union treated the country as a colony, and developed vast cotton fields. But Turkmenistan's energy resources - thought to be the fourth-largest in the world after Russia, the US and Iran - held out the prospect of prosperity, and they remain the principal reason why western business travellers are likely to visit Turkmenistan.

In the Soviet days, 80bn cu m of gas was sent by pipeline to Russia, Ukraine and Georgia. Those exports have now stopped, and Turkmenistan exports only 2bn cu m, by pipeline to Iran. Attention has turned to oil. Turkmenistan lifts 120,000 barrels per day, almost all for domestic consumption. Mr Niyazov wants production to increase by 200,000 barrels a day.

Two UK companies, Monument

and Burren Energy, share an onshore oil concession, which is producing 15,000 barrels a day. Mobil of the US is the distributor. Dragon Oil, another UK company, has a small offshore concession.

Western diplomats in Ashgabat believe there will be more business opportunities in areas such as oil and gas and construction. But, in the meantime, business travellers must be prepared to overcome the legacy of haphazard economic development.

The Soviet Union treated the country as a colony

They will need a visa. This requires a letter from the ministry of foreign affairs. Embassies in Ashgabat are prepared to act as sponsors for their nationals. But if you plan to visit the oil town of Nebit Dag or the port of Turkmenbashi, it is vital to make your intention clear in the letter, otherwise you will be confined to Ashgabat.

Once you have received a letter, you can buy a visa at the Turkmenistan embassy. At the airport, be sure to fill in the customs form to declare any foreign currency, computers, cameras, mobile phones and the like, since you will almost certainly be asked to produce them on the way out.

It is worth paying \$15 (€9.30) to

go through the commercially important person's lounge - it speeds up the process of arrival and departure.

A taxi from the airport takes 10 minutes and costs anything from \$2 to \$15, depending on your negotiating skills. However, few taxis have meters.

The best hotels in Ashgabat are thought to be the Ak Aym and the Nisa, both of which are blessed with good restaurants and cost about \$180/\$216 for a single room, and the Grand Turkman at \$140.

The big hotels have discos and casinos, and cable television in the rooms, showing CNN and BBC World. It is possible to telephone and fax internationally but it is expensive. Credit cards are not accepted anywhere except the hotels which seem to take only Visa.

English is not spoken outside the main hotels, and so you will need a guide or interpreter. It is essential to talk lots of small denomination bills. The local currency, the manat, is officially 5,000 to the dollar, but it is sinking like a stone.

Don't be left with too many surplus notes because you will not be able to convert them back. Ashgabat is a quiet town with not a lot to do, but it is easy to get around, and has no great street crime problem.

If you buy a carpet - these ones are world famous - you will need an export permit for one made earlier than 1970, and obtaining a permit can be a tiresome process.

Stewart Dalby travelled to Turkmenistan with British Mediterranean Airways

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Cyberbusiness course takes off

Prof Brynjolfsson and his co-director Prof Travaasoli are now struggling to pull

One course, to be offered by the Media Lab's Pattie Mees, will focus on "agents"



With interest running so high, Sloan gave one of its

biggest challenges will be to limit the number of students enrolling in the programme. The school wants no more than a 100 a year in the concentration. "Otherwise, they don't even get to know each other, and it becomes unworkable," says Prof. Brynjolfsson. "We'll have to keep raising the requirements for course completion - an extra paper here, another exam there - to make sure only the very committed opt for this concentration."

De Montfort
www.dmu.ac.uk

The UK's Open University Business School has signed an agreement with the Chambre de Commerce d'Industrie de Paris (CCIP) to enable the CCIP to translate and adapt OUBS's Capable Manager course for the French-speaking market.

Information for News from Campus should be sent to Della Bradshaw,
The Financial Times, One Southwark Bridge London SE1 9HL.
Tel. 44 171 873 4673 Fax 44 171 873 3950

The faithful put their trust in an MBA

Mark Chater, course leader, says "the intention is to equip participants with the knowledge, skills, attributes and experiences to make them effective and imaginative managers".

The part-time course will cover standard MBA modules but students will also learn about charity law and managing physical resources - a growing problem for churches saddled with old and decaying plant, says Mr Chater. In addition, "they will also learn to develop a theology and spirituality of management so that management thinking is not allowed to take over, but remains at the service of the

Church's message," he says. Mr Chater admits that there is something of a dichotomy between religion and business because business is all about competition and the church is based on co-operation. But he adds, "this course is not about church people taking on management language and values uncritically. It is for those who are ambitious for their church and who are not afraid of contact with

The Rev Dr William Beaver, the Church's director of communications, says that as the church gains new business skills it will improve its image. "The prevailing view of the Church of England is that it is a slightly doity, eccentric organisation but why shouldn't we be efficient and

follow best practice in human resources, communication and operational matters?" He adds that the key to the MBA in church management is that it will "breed a whole new generation of ecclesiastical administrators who can take on the leadership of the organization and take it forward into the next century."

Helen Jones

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MEDIA TELEVISION

A voyage of Discovery

A US company is determined to be an increasingly powerful force in TV markets around the world, writes **Richard Waters**

In the fragmented future of ever-multiplying digital channels, how will television companies keep their audience? The answer, according to Discovery Communications, is to assemble the biggest pack of channels you can and reach out to the whole world.

For a company launched only 14 years ago, that sounds a tall order. And if the speed at which the US company has moved in its short life has been striking, that is likely to pale in comparison with what it plans next.

Judith McHale, its president, concedes that the scale of Discovery's current ambitions has produced its doubters. "A lot of people are asking, 'What on earth are they doing?'" she says. But the race to secure shelf-space and brand identity is on. "We have to get out early and establish the product," Ms McHale adds. With a fifth of its revenues already coming from outside the US, and the proportion growing, the aim is to become an increasingly powerful force in television markets around the world.

For the first five years of its life there was just the Discovery Channel - known mainly for its documentaries about animals, many of them recycled from the

archives of the BBC. Since then, the vehicles have multiplied at an accelerating rate: The Learning Channel, bought in 1991, was followed in 1996 by Animal Planet and, only a year later, the Travel Channel.

These last two are not yet profitable. But already, Discovery is preparing its biggest investment of all: the \$350m (£215m) it is likely to take to establish the Discovery Health Channel, an attempt to tap into the hypochondria of America's ageing Baby Boomers.

The private company has also promised \$500m to back a joint venture with the BBC, including the launch of another new vehicle, BBC America. And while these channels are rolled out over the existing analog cable television networks, a stable of lower-budget digital outlets is being put in place in preparation for the time when audience fragmentation takes hold with a vengeance, with six channels created over the past two years.

The economics of the cable business have changed a lot since John Hendriks, the company's founder, started out. The first Discovery Channel, now one of the best-known brands in television, cost only \$25m to create.

These days, with new channels crowding on to limited analog networks, the balance of power has swung: cable companies in the US are reckoned to charge new channels around \$5 per subscriber in "launch costs".

But the rewards can be substantial. Fuelling Discovery's

'When you're faced with fragmentation, you're better off owning more slots'

headlong rush is the \$300m of cashflow that its flagship channel will generate this year, and the \$125m produced by the Learning Channel, according to estimates from Credit Suisse First Boston.

There are two forces behind the ever-increasing speed at which Discovery is moving. One is the need to generate a big enough audience to deliver to advertisers once the digital era finally arrives.

"When you're faced with fragmentation, you're better off own-

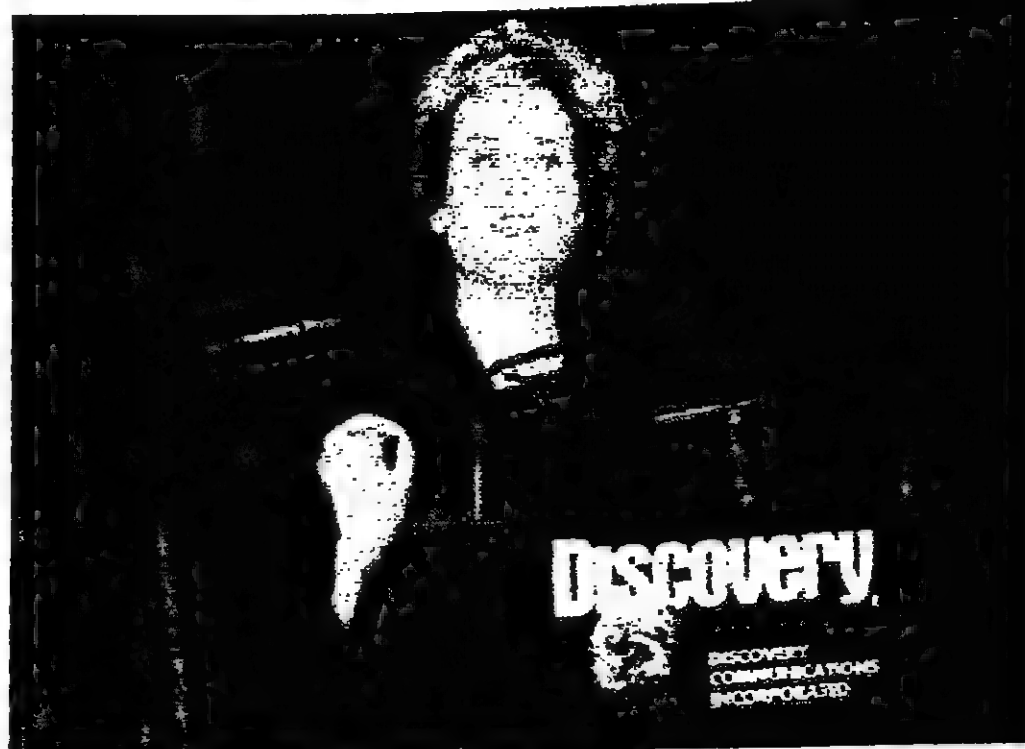
ing more slots," says Ms McHale. That makes it possible to "aggregate viewers for your advertisers".

Until now, the Discovery president concedes, the promise of digital television has been "an ever-receding horizon", always seemingly about to arrive but never quite here. This time, she says, things are different: the final quarter of last year produced the first real signs that digital subscribers are about to take off.

A second factor behind the fast-moving business plan has been the a desire to spread the costs of running the group, and creating programming, as widely as possible. Ms McHale claims "the most sophisticated international network structure of anyone", reaching more than 70m subscribers in 142 countries. With that sort of a base, it becomes cheaper to launch a new network than it would be to create one from scratch.

The growing international reach is also improving the economics of programming. "The whole theory of developing international business is that for marginal additional cost, you can develop significant additional revenues," says Don Wear, head of international operations.

The group's fact-based content helps: much of it can cross borders without having to cross the



McHale: "We have to get out early and establish the product."

cultural gap that a sitcom would have to bridge.

Discovery staged a show of strength last night to prove the point. An archaeological production, titled *Cleopatra's Palace*, was aired at 9pm in all the countries that Discovery reaches - its second effort at trying to create a "buzz" around a single global event, after an exploration of the wreck of the Titanic last year. And for the first time, two advertisers bought slots to promote their own global brands. Visa and

Merrill Lynch are said to have paid a premium of around \$1m between them for the chance to reach an audience around the world through a single vehicle.

The first phase of Discovery's push abroad is already nearly complete. With Europe and Latin America already turning a profit in cashflow terms and Asia about to cross that threshold, "we are one of the few [media] organisations that can say, on a global basis, that we are profitable," says Ms McHale.

The drive is on outside the US to produce the same collection of channels that Discovery has created at home: there are already seven Discovery channels in the UK, with four in Latin America and two in India.

With a powerful brand and a well-established model for spinning off new channels, this is likely to make it a formidable competitor to national broadcasters around the world - provided, of course, that it does not over-reach.

TECHNOLOGY DIGITAL WATERMARKS

Yet to make its mark

Geoff Naim on developments in copyright coding

Enforcing copyright over digital content is today a frustrating task because of the ease with which it can be distributed over the Internet and manipulated to hide its origins.

Digital watermarking tries to overcome this problem by adding hidden information to digital images, video clips or music. A digital watermark is a code interwoven into the original data that is supposedly imperceptible to listener or viewer.

When digital content is distributed online or recorded on disks, tell-tale copyright data travels with it, encoded in the digital watermark. This allows the copyright holder to demonstrate a claim to intellectual property rights.

Research into digital watermarks only began around 1983 but the subject is now attracting intense interest, most recently from record companies worried about the proliferation of music websites that do not pay royalties.

In the past two years, at least a dozen watermarking technologies have been developed, as well as complete copyright management systems for licensing and tracking watermarked material on the Internet. But their uptake so far has been disappointing.

Bruce Davis, president and chief executive of Digimarc, a US pioneer of digital watermarks, blames the poor take-up on the legal uncertainty surrounding digital copyright and the slow speed of today's Internet.

The excessive time required to download high-quality images makes it unrealistic to expect many users to buy stock photography over the web, for example. But Mr Davis is confident the Internet will soon be fast enough to support such applications.

"As Internet bandwidth increases, content will acquire a much higher value and digital watermarks will become an important way of proving copyright," he says.

He also takes comfort from the Digital Millennium Copyright Act, new US legislation that outlaws technologies designed to break copyright protection devices, including encryption and digital watermarks.

There are several ways to alter commercial watermarks so that they can no longer be detected. The distortion may be unintentional - some of the "special

effects" in commercial image editing software can render watermarks unrecognisable - or manipulation may be deliberate.

In the latter category is StirMark, a software tool that can alter watermarks created by Digimarc. Signum Technologies and other vendors so that they can no longer be detected.

StirMark is available from the website of Fabien Petitcolas, a researcher at the University of Cambridge (UK). A specialist in "steganography" - the science of hiding information - Mr Petitcolas uses his website to expose the vulnerability of today's commercial products. "These schemes are not robust enough and hence the current technology is not ready for public use," he says.

Inevitably, a company has risen to the challenge and developed a watermark that it claims will resist "attack" by StirMark. The company, Blue Spike, has developed separate versions of its Glomarc technology to protect both still images and audio.

The audio version has been designed to survive the "lossy compression" techniques which remove extraneous data so that audio signals can be converted into reasonably small digital files.

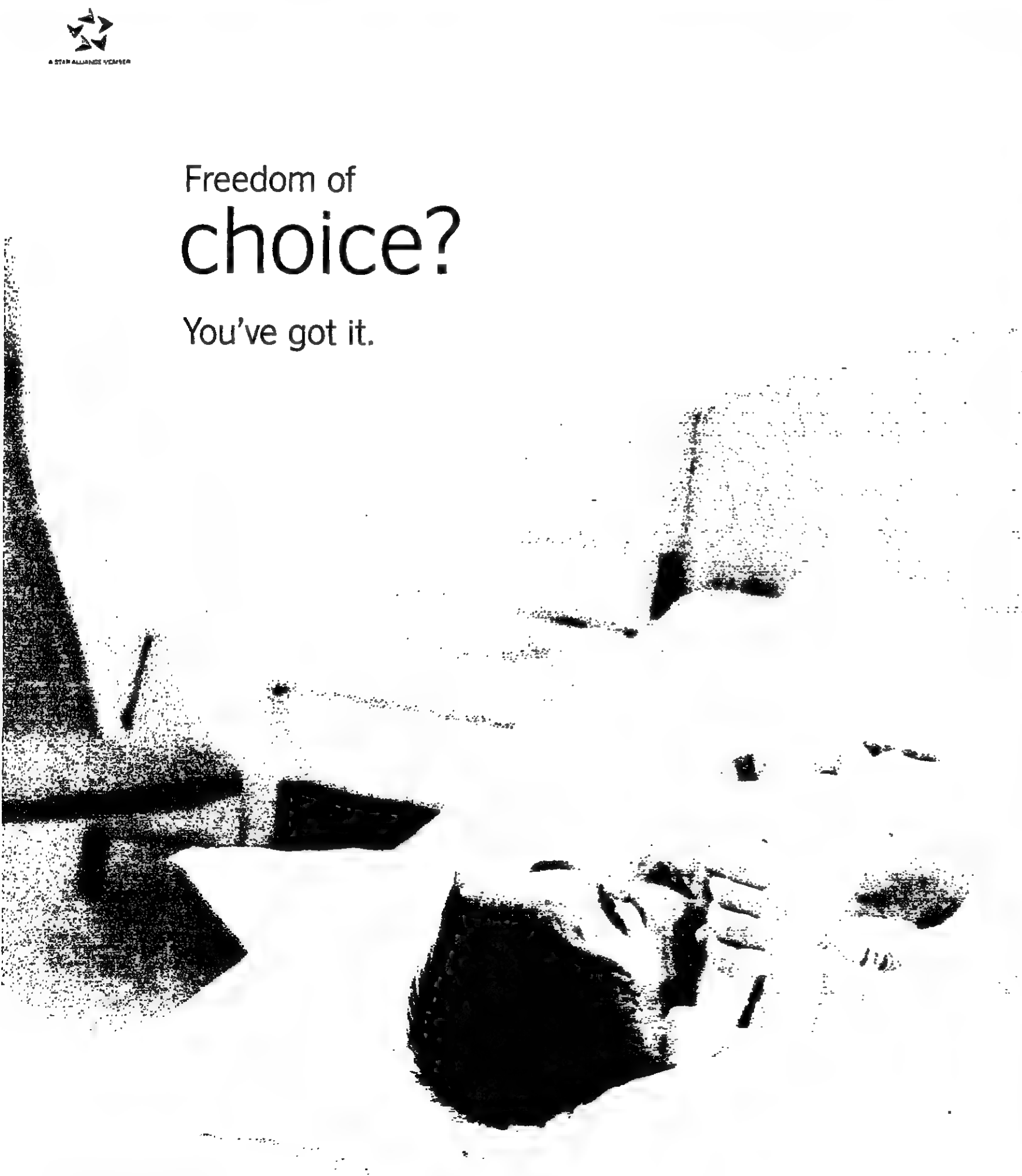
One such technique is MP3 and the music industry is particularly interested in methods of watermarking and encrypting MP3 files because of the proliferation of websites illegally distributing copyright music in this format.

The same issue could soon affect the digital TV industry. Christoph Busch, head of security technology at the Fraunhofer Institute for Computer Graphics, sees a promising opportunity for watermarking in protecting real-time digital video streams.

One of the problems with digital TV is the signals can easily be intercepted by pirates and retransmitted over the Internet or via satellite or terrestrial networks.

The institute has developed a watermarking algorithm for use on broadcast quality video images. Thanks to specially designed hardware, the system can embed watermarks in video streams in real time, so allowing it to be used for the live transmission of sports events, for example.

Such content loses much of its value if it is retransmitted later so pirates must "attack" the watermarked video stream in real time, adding to their technical challenge.



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THE ARTS

OPENINGS



MILAN

A new production of Tchaikovsky's *Mazepa* opens at La Scala on Saturday, conducted by Mstislav Rostropovich (above) and staged by Lev Dodin. Anatoly Kocherga and Olga Gurlukova head the cast.

NEW YORK

Nearly 70 masterpieces of medieval panel painting, sculpture, textiles and manuscript illumination have been lent by the Basilica of San Francesco in Assisi for an exhibition opening tomorrow at the Metropolitan

Museum. They include some of the key monuments in the development of early Renaissance art. The exhibition, entitled "The Treasury of Saint Francis of Assisi", is designed to heighten awareness of the effects of the earthquakes that devastated the Italian town in 1997.

Plácido Domingo is the centrepiece of an all-star revival of *The Queen of Spades* at the Metropolitan Opera on Thursday. Valery Gergiev conducts, and the line-up also includes Olga Borodina, Galina Gorchakova and Dmitri Hvorostovsky.

David Hare, whose work is ever-present on Broadway these days, steps on stage himself in his one-man play *Via Dolorosa*. Inspired by a 1997 trip to the Middle East and directed by Stephen Daldry, it opens in a

Lincoln Centre Theatre production at the Booth, on Thursday.

VIENNA

"The New World in 19th Century Painting" is the title of an exhibition opening at the Österreichische Galerie



Belvedere on Wednesday. It documents the artistic development of the American people from the Declaration of Independence in 1776 to the New York Army Show of 1913.

LONDON

The 20 surviving paintings attributed to the Netherlandish artist Rogier van der Weyden (left) are scattered across Europe and the US, and most are too fragile to travel. The National Gallery has five, and these are supplemented by two from the Gulbenkian in Lisbon and two from the Getty in California for an exhibition, opening on Thursday, which celebrates the 600th anniversary of the artist's birth. Ian Judge is back at the Coliseum to stage English National Opera's new production

of Britten's *Mefistofele*. He is partnered by Slovak conductor Oliver von Dohnányi and a cast including Alastair Miles, David Rendall and Susan Patterson. The first night is on Thursday.

On Wednesday Northern Ballet Theatre brings its spookily effective *Dracula* (right) to Sadler's Wells for a season which runs until 27 March.

Two productions open this week at the National Theatre. A new repertoire season begins at the Olivier, directed by Trevor Nunn and John Caird, in which the same team of actors will handle Shakespeare's *Titus Andronicus* (opening tonight) and

Leonard Bernstein's musical *Candide* (in April). On the Lyttelton stage, the Abbey Theatre's production of Dion Boucicault's Irish classic *The Colleen Bawn* opens on Thursday, its director is Connal Morrison.

PRAGUE

Since the Velvet Revolution, the State Opera has made its name by delving into its prewar history as Prague's German opera house. Its latest excavation is Emil Burian's *Bubu from Montparnasse*, composed in 1927. Veteran conductor Bohumil Gregor presides over the first night on Saturday.



Monument to one man's taste: yet the show, which includes Fernand Léger's 'Liberté' (above), is also quintessentially French

Politician with cultural vision

Paris is celebrating the cultural legacy of the late president Pompidou, writes Jackie Wullschlaeger

Imagine visiting an exhibition of pictures at the Harold Wilson Cultural Centre in London, or taking a seat at the Margaret Thatcher National Library. Unlikely? Of course – because leading political figures have never been important patrons in Britain. In Paris, on the other hand, the most natural thing is to drop into the Centre Culturel Georges Pompidou or the Bibliothèque François Mitterrand – both audacious, high-profile buildings that speak for their times.

Pompidou and Mitterrand are examples of French presidents whose cultural legacies were part of a wider political vision to bring modernity and education to the masses in ways which were exciting and accessible. One of Pompidou's aides suggests that to become this sort of patron is a natural role for a 20th-century leader. Often held so in check by bureaucracy and the democratic process that they can change little, monuments such as the Pompidou Centre or Mitterrand's Trés Grand Bibliothèque ensure immortality through art.

This is just one of the strands running through a mesmerising new exhibition, *Georges Pompidou et la modernité* at the Galerie Nationale du Jeu de Paume to commemorate the 25th anniversary of Pompidou's death. A second is the story of Pompidou the private collector, discreetly amassing

some of the finest art of the 1950s and 1960s. A third aspect unites these two strands and is a voyeur's delight – an exquisite series of recreations of the presidential living quarters, "les appartements de l'Élysée", from the 1960s and 1970s. Here you can attend fantasy dinners with the president and find out how the radical and shocking in the 1960s had, when endorsed by the state, become a symbol of wealth and power by the 1970s.

No career epitomises this movement better than that of Georges Mathieu, a friend of Pompidou. Mathieu's enormous oil painting "La Bataille de Brunkeberg" (1936) is the centrepiece of the opening room, a vast black background splattered with thick fireworks of paint in red and yellow. In the 1950s, Mathieu's lyric, non-geometric abstraction was as innovative as the neo-expressionism of American artists such as Jackson Pollock, and, painting a 12th canvas in the presence of an audience in 1966, Mathieu anticipated the shock-effect "happenings" of 1960s US artists.

By 1974, the year of Pompidou's death, however, Mathieu was designing the new 10-franc coin, and some of his greatest works, such as "Un silence de Guibert de Nogent", were already bought for the planned Pompidou Centre. Interviewed for the catalogue to this exhibition, Mathieu likens

Pompidou's patronage to that of Louis XIV, and says the president "woke up France to modernity: to industrialisation".

It is the spirit of the man and his particular taste that is electrifying: gregarious, curious, open-minded. Pompidou had made links with artists since he bought his first Max Ernst drawing at the age of 17 and became a close friend of the

Pompidou's patronage, which 'woke up France to modernity', has been likened to that of Louis XIV

painter. He had exceptional presence, choosing the works of experimental Nouveau Réalistes such as Martial Rayssac, Arman and Raymond Hains at a time when it was impossible to predict that precisely such artists would become emblematic of the 1960s.

Highlights from Pompidou's own collection include Arman's "Joan's Violin", a combusted instrument set in resin and polyester. Rayssac's pop-art "France Orange", in which a photograph of a Bardot-esque

1960s babe tinted fluorescent green is set against a bright orange square of canvas and wood; and one of Yves Klein's famous monochrome blue canvases, bought the same year (1960) that Klein's "Anthropométries de L'Époque bleue". In which naked women smeared themselves in blue paint while 30 musicians played a single note for 10 minutes, was causing a scandal at a Paris gallery.

In the bright, high-ceilinged first-floor rooms of the Jeu de Paume, the juxtaposition of this sort of work with one of the most gracious views of classical Paris is sensational. At the great observation window looking down the magnificent facade of the Rue de Rivoli stands César's mass of spangled metal "Ricard", a compressed car, and Poi Bury's round silver sculpture of 12,000 metal balls. Jean Tinguely's "Meta no 3", a mixed installation of iron and three motors from 1970-71 also looks out on to the roofs of Paris, and sends viewers back to the first work in the exhibition, Nicholas de Stael's "Les Toits de Paris" (1962).

The recreated presidential rooms are also extraordinary in the context of classical Paris surrounding them, with luminous floors and multicoloured carpets, they become a child's psychedelic paradise when viewed through panels that make the interior change colour and cast a giant

floor sculpture, a bent triangle halting on a silver ball, in ghoulish blues and purples.

Pompidou was a connoisseur vividly alive to the new but who was also steeped in tradition. He kept a book of ancient Greek poetry on his desk and snatched a few seconds' relaxation by reading it. His *Anthologie de la poésie française* (1961), ranging from courtly medieval lyrics to Apollinaire and Paul Eluard, became a classic – it is read aloud here in a white ante-chamber, bare except for a stately bronze bust of the president by Etienne Hajdu.

Pompidou saw that Paris risked losing out culturally to London and New York, pop-art centres of the 1960s, and his bold projects to inject a contemporary thrill into the French capital continue to have a central role today. The Pompidou Centre – his own idea – has fulfilled his dream of a cultural centre for Paris attracting people who would not normally visit galleries or concert halls. A huge room of models and screen images, accompanied by 1970s music and Paris street sounds, is given to the centre's architecture and construction here.

This is a quintessentially French show: patriotic, democratic, celebrating at once cultural innovation and the political will to make things happen. Yet it is also a fascinating monument to one man's personal taste in an era that stands for us between the historic and the contemporary.

At the Galerie Nationale du Jeu de Paume, 1 place de la Concorde, Paris, until April 15.

MUSIC TOWARDS THE MILLENNIUM

Rattle returns to an Odyssey

There's nothing like a millennium for concentrating minds on a century. But the closer Simon Rattle's survey of 20th century music gets to the present, the more shapes the picture becomes – and the harder it is to make hard-and-fast judgments. We now have a wealth of pre-millennial concert series, but none more far-sighted than Rattle's "Towards the Millennium".

He and the City of Birmingham Symphony Orchestra have advanced to the 1980s, a decade of enormous significance for them both. Whatever else was going on in the world – Thatcherism, perestroika, Reaganomics – it was a time of musical *laissez faire*, when the demise of central European orthodoxies left the field open to composers from Russia, Poland, the UK and US. Rattle avoids non-Rattle territory, such as Schnittke's Fifth Symphony and the Trumpet Concerto from Stockhausen's *Donnerstag*, both of which would have been worth re-visiting. His choice nonetheless suggests a surprising number of repertoire-worthy pieces.

The exception is Nicholas Maw's *Odyssey*, which took up the whole of the second programme in Birmingham last Thursday (repeated at London's Royal Festival Hall tonight). This was his first UK outing since Rattle recorded it in 1991, and while I'm glad I heard it, I won't be rushing out to grab it again. It is a brave, noble and often inspired experiment that ultimately collapses under its own weight, leaving composer, orchestra and audience exhausted.

Maw uses the idea of a spiritual journey as an excuse for stylistic unevenness and creative longwindedness. By arguing that the size of his themes demanded a structure of equal scale, he simply wrote his own prescription for gigantism. But is the opening 44-bar cello theme really that memorable? The skill with which Maw explores it is another matter: melodies of extraordinary beauty compete with each other for our attention, supported throughout the 90-minute span by a textural palette of constantly unfolding richness. By the latter half, there's too much to

admire, and no room to stand back and breathe.

That sounds unduly negative when you recall the sheer breadth of terrain covered: the expectation aroused by the first "time-chord"; the pastoral English mood at the culmination of Part 2; the solo horn's statement at the work's epicentre; the tumultuous compression of the final two parts. Listening to the confident voice of those closing 30 minutes, which Maw wrote in a flourish after years of creative slog, I

It is a brave, often inspired work that ultimately collapses under its own weight

wished he had started afresh in the same vein.

Sir Simon guided us through it all with supreme clarity, supported unflinchingly by his orchestra: as he loosens his ties with Birmingham, the Rattle/CBSO marriage seems more alive than ever. They had even more fun with Lutoslawski's Third Symphony, which opened "Towards the Millennium" the previous weekend in London. Lutoslawski convinces us that the tighter the framework, the more pungent the statement. This performance captured the symphony's Beethovenian drama, its Debussyian intricacy, its subtle creation and dissipation of tension, and a sense of enveloping sound and intellectual organisation in perfect harmony. A masterpiece.

After that, Takemitsu's guitar concerto was pure wallpaper music, despite John Williams's contribution, and every bar of John Adams's *Harmonium* betrayed its time and provenance. But let's not be fussy. Minimalist word-setting is so formulaic that it's best just to sit back, and submit to Adams's teeming instrumental palette and infectious rhythms. Rattle and the CBSO Chorus pulled off an ecstatic performance.

Andrew Clark

INTERNATIONAL

Arts Guide

AMSTERDAM

DANCE
Het Muziektheater
Tel: 31-20-551 8911
Dutch National Ballet programme combining the Dutch premiere of *Acts of Light* by Martha Graham, with the world premiere of Krzysztof Pastor's *Bitter Sweet*, and Balanchine's *Symphony in C*; Mar 19

OPERA
Netherlands Opera, Het Muziektheater
Tel: 31-20-551 8911
Die Zauberflöte; by Mozart. Conducted by Hartmut Haenchen in a revival of Pierre Audi's staging co-directed by Saskia Boddeke; Mar 15, 18

BERLIN

OPERA
Deutsche Oper
Tel: 49-30-34384-01
Aida; by Verdi. Conducted by Lawrence Foster in a staging by Götz Friedrich; Mar 15
Tosca; by Puccini. Conducted by Jacques Delacôte in a staging

by Boleslaw Barlog; Mar 16

BIRMINGHAM

CONCERT
Symphony Hall
Tel: 44-121-212 3333
London Sinfonietta: Higglety Pigglety Pop! and Where the Wild Things Are, conducted by their composer Oliver Knussen; Mar 16

BOLOGNA

OPERA
Teatro Comunale
Tel: 39-51-529999
La Cenerentola; by Gioacchino Rossini. Conducted by Bruno Bartoletti in a revival of Lilliana Cavani's staging, first seen in Zurich four years ago. The cast is led by Daniela Dessi and Alberto Cupido; Mar 16, 18

CHICAGO

CONCERT
Orchestra Hall
Tel: 1-312-294-3000
www.chicagosymphony.org
Chicago Symphony Orchestra: conducted by Pierre Boulez in works by Stravinsky, Debussy and Berlioz, with harp soloist Sarah Bullen; Mar 18

DRESDEN

OPERA
Semper Oper
Tel: 49-351-48420
Ariadne auf Naxos; by R. Strauss. Conducted by Colin Davis in a new staging by Marco Arturo Marelli. Cast includes

Susan Anthony and Jon Villars; Mar 17, 19

LONDON

CONCERTS
Queen Elizabeth Hall
Tel: 44-171-980 4242
● London Mozart Players: conducted by Matthias Bamert in a programme of works by Mozart, with tenor Mark Tucker; Mar 18
● London Sinfonietta: Higglety Pigglety Pop! and Where the Wild Things Are, conducted by their composer Oliver Knussen; Mar 17

Royal Festival Hall
Tel: 44-171-980 4242
● BBC Concert Orchestra: conducted by Barry Wordsworth in works by Rossini, Handel, Sibelius and Rimsky-Korsakov, with violin soloist Tasmin Little; Mar 16
● City of Birmingham Symphony Orchestra: conducted by Simon Rattle in Nicholas Maw's *Odyssey*; Mar 15
● Philharmonia Orchestra: conducted by Benjamin Zander in a selection of waltzes by J. Strauss, and Mahler's Symphony No. 5; Mar 18

EXHIBITION
Tate Gallery
Tel: 44-171-887 8000
Jackson Pollock: arriving in London from New York, this major retrospective of the Abstract Expressionist comprises around 80 paintings and drawings drawn from major public and private collections

NEW YORK
CONCERTS
Avery Fisher Hall, Lincoln

worldwide; to Jun 6

OPERA

English National Opera, London Coliseum
Tel: 44-171-632 8300
● *Mefistofele*; by Boito. Conducted by Oliver von Dohnányi in a new staging by Ian Judge; Mar 18
● *Parsifal*; by Wagner. Conducted by Mark Elder in a new staging by Nikolaus Lehnhoff, with sets by Raimund Bauer and costumes by Andrea Schmidt-Futterer; Mar 16

MUNICH

CONCERTS
Philharmonie Gastspiel
Tel: 49-89-5481 8181
● Bavarian Radio Symphony Orchestra: conducted by Lorin Maazel in works by Bruckner; Mar 17
● Stuttgart Radio Symphony Orchestra: conducted by Yutaka Sado in works by Gershwin, Chopin and Prokofiev. With piano soloist Ivo Pogorelich; Mar 18

OPERA
Bayerische Staatsoper
Tel: 49-89-2185 1920
www.staatsoperbayern.de
Katyá Kabanova; by Janáček. Conducted by Paul Daniel in a staging by David Pountney, with sets by Stefanos Lazaridis and costumes by Marie Jeanne Lecca; Mar 17

NEW YORK
CONCERTS
Avery Fisher Hall, Lincoln

Center
Tel: 1-212-875 5030

www.lincolncenter.org
● New York Philharmonic: conducted by Paavo Järvi in works by Paul Creston, Bartók and J. Brahms; Mar 16
● New York Philharmonic: conducted by Yuri Temirkanov in works by Shostakovich and Stravinsky, with violin soloist Hilary Hahn; Mar 18, 19

OPERA

Metropolitan Opera, Lincoln Center
Tel: 1-212-362 6000
www.metopera.org
The Queen of Spades; by Tchaikovsky. Conducted by Valery Gergiev in a revival of Elijah Moshinsky's staging, designed by Mark Thompson. The cast is led by Plácido Domingo, Galina Gorchakova and Olga Borodina; Mar 18

New York City Opera, New York State Theater
Tel: 1-212-870 5570
www.nycopera.com
● Lizzie Borden; by Jack Beeson. New production conducted by George Manahan in a staging by Rhoda Levine, with Phyllis Panchella in the title role; Mar 18
● *Madama Butterfly*; by Puccini. Conducted by Guido Johannes Rumsdahl in a staging by Mark Lamos first seen in November, with sets by Michael Yeargan; Mar 17

NEWCASTLE
CONCERT
Avery Fisher Hall, Lincoln

City Hall
Tel: 44-191-261 2606

Stuttgart Philharmonic: conducted by Jorge Pater Weigle in works by Wagner, Brahms and Strauss, with piano soloist Barry Douglas; Mar 15

PARIS

OPERA
Opéra National de Paris, Opéra Bastille
Tel: 33-1-4473 1300
www.opera-de-paris.fr
The Magic Flute; by Mozart. Conducted by Friedemann Layer in a staging by Robert Wilson; Mar 15, 16, 17

Opéra National de Paris, Palais Garnier
Tel: 33-1-43439696
www.opera-de-paris.fr
La Cenerentola; by Rossini. Conducted by Ivor Bolton in a staging by Willy Decker with designs by John MacFarlane. Cast includes Theo van der Walt and Christine Goerke; Mar 15, 18

SAN FRANCISCO

CONCERTS
Davies Symphony Hall
Tel: 1-415-864 6000
www.sfsymphony.org
San Francisco Symphony Orchestra: conducted by Herbert Blomstedt in works by Berwald and Brahms; Mar 18, 19

TOKYO

CONCERTS
Suntory Hall
Tel: 81-3-3584 9999

● Vienna Philharmonic Orchestra: conducted by Riccardo Muti in works by Schumann and Shostakovich; Mar 16
● Vienna Philharmonic Orchestra: conducted by Riccardo Muti in works by Mozart; Mar 17
● Vienna Philharmonic Orchestra: conducted by Riccardo Muti in works by Schubert and the Strausses; Mar 18

● Vienna Radio Symphony Orchestra: conducted by Heinrich Schiff in works by Beethoven and Dvorák; Mar 19

TV AND RADIO

● **WORLD SERVICE**
BBC World Service radio for Europe can be received in western Europe on medium wave 648 kHz (463m)

● **CNN International**
Monday to Friday, GMT:

06.30: *Moneyline* with Lou Dobbs
13.30: *Business Asia*
19.30: *World Business Today*
22.00: *World Business Today Update*

● **Business/Market Reports:**
05.07; 06.07; 07.07; 08.20; 09.20; 10.20; 11.20; 11.32; 12.20; 13.20; 14.20.

At 08.20 Tanya Beckett of FTTV reports live from LIFFE as the London market opens.

COMMENT & ANALYSIS

FT INTERVIEW ALEKSANDER KWASNIEWSKI

Polish passion

Stefan Wagstyl and Christopher Bobinski meet Poland's popular president, a former communist who has embraced market reforms and taken his country into Nato

Aleksander Kwasniewski, the Polish president who took his country into Nato last week, speaks like a man at ease with power and its privileges. Even his political enemies respect the way this former communist has grown into his job in the 2½ years since taking office.

When the Berlin Wall came down 10 years ago, few people would have predicted that one of the most popular politicians in eastern Europe would be an ex-member of the nomenklatura. Least of all in Poland, the country of Pope John Paul II, the Solidarity trade union, and Lech Walesa.

Yet it was not Mr Walesa, but Mr Kwasniewski, sports minister in the last Communist government, who presided over Nato entry. He has rarely put a foot wrong since he defeated Mr Walesa in the 1996 presidential elections. (Mr Kwasniewski ran as the candidate of the ex-communist Left Democratic Alliance, or SLD.) The hands-on, 44-year-old politician is now so far ahead in opinion polls that the Solidarity-linked parties on the political right are struggling to prepare for next year's presidential poll.

If he runs again and wins, Mr Kwasniewski could still be in office when Poland joins the EU early in the new century, assuming negotiations with Brussels go well. The man who started his political career looking east for guidance would then have completed his country's reorientation towards the west.

Mr Kwasniewski talks eloquently about the sea-change in Poland's international position. In joining Nato, Poland is entering a 50-year-old alliance "wedded to democracy, free markets and the defence of human rights".

Security is all-important for a country which has been a battlefield for hundreds of years, he says. But Poland has to play a serious role in Nato, in particular in

keeping alive plans for further eastward expansion.

"The open-door policy must not be just an empty slogan," he says. EU entry is more difficult because of the complexity of preparing the whole economy to EU standards. He recognises the union's problems in simultaneously implementing enlargement, internal reform and the launch of the euro.

He says he also sees "a sense of tiredness" in the west following the great upheavals triggered by the fall of the Berlin Wall. But Mr Kwasniewski argues that rapid change in Poland and the other candidate countries will drive enlargement forward. Poland plans to be ready for entry by the end of 2002. "Whether the EU will be ready for us then is an open question. But the initiatives are continuing [to try to make that possible]."

Mr Kwasniewski looks pained when asked to account for the success of his political transformation.

He clearly so much enjoys the present that he hates to be reminded of his communist past. He says it is a sign of Poland's "political maturity" that voters are ready to support him.

"People recognise that Polish communism was not so bad. It was no accident that the reforms of 1989 [which led to open elections in

Poland] happened with Communist support."

Mr Kwasniewski might also have added that voters are so impressed with his performance that they are prepared to set aside the past, albeit sometimes reluctantly. In opinion polls he scores highly for intelligence and good looks, but gets low marks for political honesty.

Unlike Mr Walesa (who, as president, was unable to capitalise on his legendary role as Solidarity leader), Mr Kwasniewski has mastered the intrigues of Warsaw politics. Forced to co-habit with a right-of-centre government, he might easily have been limited to the role of a political spoiler. Instead, he has actively supported the market-oriented reforms of Leszek Balcerowicz, the dynamic finance minister.

Mr Kwasniewski is pro-Nato, pro-EU and pro-economic modernisation, but he rarely misses a chance to score political points.

Last year he intervened in a heated debate over regional reform in which the government was planning to cut the number of regional authorities from 49 to 13 - to the anger of people in cities which were about to lose their status as regional capitals. Mr Kwasniewski successfully pushed for 16 regions. Not a big change in the overall picture, but enough to win gratitude in

at least four places. The president says all reforms "produce a reaction from some group or another". He believes good preparation is all-important, including consultation with those involved.

For example, he argues that Poland's recent pension reforms have gone smoothly because the groundwork was laid before the current government took office - not missing the chance to take some credit since the former government was led by the ex-Communist SLD. However, he says this year's unpopular reorganisation of the health service has been badly implemented, and planned education reforms could also "end in a fiasco".

Mr Kwasniewski's greatest concern is for Poland's villages, which have seen little progress in the 1990s. Farmers recently blocked roads in support of demands for more government aid. Farming families feel isolated by a growing gap between city and rural incomes.

"People in the villages ask, 'where is our place in all these reforms?' We need to talk to farmers about the EU. We need to tell them that while there will not be room in the EU for every Polish farmer, Polish farming will definitely have a place," the president says.

Farmers who give up farming must be found other work so that village life as a whole benefits from EU entry, he says.

It is a theme close to his heart, since Mr Kwasniewski comes from a town in the depressed rural Kozalin region in northern Poland. The son of local doctors, he was in a good position as a child to see the realities of village life. He says: "The Polish village faces a big structural revolution."

But Mr Kwasniewski does not allow himself to dwell too long on the subject. He is a politician ruled not by passion but by political instinct. It has served him well so far and promises to do so in future.



A man at ease with power: Aleksander Kwasniewski

LETTERS TO THE EDITOR

Evidence in Europe in past decade of 'anti-capitalist' contradictions

From Mr Michael Barratt Brown

Sir, Samuel Brittan ("No end of work", March 4) has taken up the cudgels in defence of the system and against what he calls "the authors of anti-capitalist tracts".

His arguments are less than usually convincing. They are concerned to demolish what he says is a dangerous fallacy - that growth today is not creating jobs. He compares this to the "lump of labour fallacy", ie, that there is only a fixed amount of work to be done and therefore increases in productivity must reduce employment. No "anti-capitalist author" to his knowledge believes that; indeed, it is their whole case that jobs can be created by government action.

What they do believe is that it may be a very long time under capitalism for increases in productivity in

one part of the economy to be translated into new jobs elsewhere. In the meantime there is wasteful and distressful unemployment. The examples Sir Samuel gives from English history of technological change - in transport, sheep farming, the Agricultural Revolution, the Industrial Revolution - show precisely that. His advocacy of increased leisure as a form of economic growth is of course to be welcomed, but it must be voluntary leisure.

Sir Samuel seeks to pillory his adversaries with what he says is a contradiction in their thinking - that you cannot have both falling rates of productivity and jobless growth; it must be one or the other. But it must be accepted that you can get some small increase in productivity from a smaller increase in output but with less labour. What we have had in Europe

in the past decade compared with earlier decades is just that: lower productivity increases and lower rates of growth with less labour.

The US has had a different experience. But when Sir Samuel protests against critics of the poor quality of the jobs there, and claims the most rapid job growth has been in highly skilled jobs, this does not answer the fact that the largest number of new jobs in the US has been in low-skilled services.

The real problem, which he evades, is there has been not only a widening differential between the better paid and the less well paid there, but an actual fall in the real earnings of US manual workers over three decades - surely a recipe for slump.

Michael Barratt Brown, Robin Hood Farm, Baslow, Bakewell, Derbyshire DE4 1PQ, UK

Trade should protect natural resources

From Mr Ronnie Ball

Sir, The banana dispute between the US and the European Union is just one of many increasingly bitter battles between those intent on liberalising trade at all costs (frequently led by the US) and those concerned to develop economies sustainably and humanely (often championed by the EU).

It is barely a fortnight since the last battle between these two trade titans. In Cartagena, Colombia, the US and five other exporting nations of genetically modified food (Argentina, Australia, Canada, Chile and Uruguay) prevented the EU and developing countries from agreeing a Biosafety Protocol to regulate safe production of and trade in biotechnology products. They did so partly on the grounds that the proposed protocol would clash with World Trade Organisation rules.

Free trade as a principle is useless if the scarce resources of developing countries are destroyed in its pursuit.

This week, in response to a proposal from Sir Leon Brittan, EU trade commissioner, the WTO will host two high-level symposia, one on trade and the environment (March 15-16) and one on trade and development (March 17-18). These meetings must be the first stage in a process to revise international trade to protect the human and natural resources on which that trade is based.

Developing country ambassadors should be at these meetings to ensure their needs are addressed.

Ronnie Ball, environment and development co-ordinator, Friends of the Earth International, 26-28 Underwood Street, London N1 7JQ, UK

Hostages to ghosts of Stalin and Hitler

From Mr Margers Plinls

Sir, Your editorial "Nato balancing act in the East" (March 10) accords too little merit to the desirability of admitting the Baltic states into the alliance sooner rather than later. Modern Estonia, Latvia and Lithuania were founded after the first world war, in the same period as Poland, Hungary and Czechoslovakia. The albatross of their still being thought of as ex-Soviet republics, and somehow more beholden to the passions of Russian xenophobes, started only with the Molotov-Ribbentrop Pact of 1939 and the resulting Soviet occupation. In 1940, Stalin forcibly annexed these countries to the USSR. Thus, even after Nazi Germany's defeat, Estonia, Latvia and Lithuania were the only

countries not to have at least nominal independence restored. It is not right to use the legacy of their long, brutal and illegal occupation to justify denying them the right to rejoin their natural allies in the west.

When Nato was founded, few of its original members could present a credible defence against the growing Soviet threat. Even fewer of these countries had rebuilt their economies from the destruction of war. Nato provided security not only against Soviet hegemony. It also provided a framework for alliance members, some of whom had been historic enemies, in which to establish mutually beneficial economic relationships without fear of compromising national security. This formula will work with the Bal-

tic Association to the UN, 115 West 183rd Street, Bronx, NY 10453, US

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Silicon subcontinent

India's software industry is thriving thanks to the millennium bug. Krishna Guha and Paul Taylor ask whether it can make it to the big-time league

Forget Silicon Valley. Investors looking for the next Bill Gates should set their sights on India's software entrepreneurs.

Infosys Technologies, an 18-year-old company based in Bangalore, India's capital of high tech, last week became the first Indian company to list on Nasdaq alongside some of the world's leading technology stocks. In India, the event was greeted as the coming of age for its software industry.

With other Indian companies planning Nasdaq listings, Nandan Nilekani, managing director of Infosys, says the industry is moving on to a new plane: Indian software companies will enjoy a higher international profile, their access to capital will be enhanced, and companies will have lucrative share-option schemes (in dollars, of course) with which to attract talented software engineers.

The Infosys listing is a testament to the extraordinary progress made by India's software industry - the nation's only outright success story of the 1990s.

For the past eight years, the sector has expanded at annual rates of more than 50 per cent. The growth forecast for this year is 70 per cent. The value of the Bombay market software index has risen 15-fold since the start of 1997.

The industry, whose star performers include Infosys, Wipro, NIIT, Satyam, Tata Infotech and Pentafour, now commands a market capitalisation of \$15bn. And this does not include Tata Consultancy Services, the largest Indian software company, which is still in private hands.

Export earnings, estimated at \$2.6bn this year, are still modest but are growing rapidly. The government is predictably upbeat. A National Task Force on Information Technology recently set a target of \$50bn exports by 2008, by which time it predicts software will be India's biggest export. Many industry insiders believe that target is too conservative.

And yet the industry is not 20 years old. The first software companies were established in the mid-1980s,



Nasdaq listing: India's software industry has progressed rapidly

when the government removed tariff barriers and began to encourage inward investment from US technology groups.

It was not just low wages that attracted companies such as Texas Instruments, Motorola and Oracle; the educational standards of young Indian programmers and their command of English were seen as important advantages over competing locations elsewhere in Asia or in Eastern Europe. Foreign investment spurred local imitators and the creation of wealth on an unprecedented scale.

Nevertheless, a small number of sceptics suggest that the phenomenal growth of India's software industry this decade was at least partly due to an accident of timing.

The Year 2000 computer date problem triggered a wave of demand for services which could not be met by the available pool of programmers in Europe and the US. So problem solvers began outsourcing some of the work to India.

"God's gift to India was Y2K," says Srinivasan Raju, executive director of Satyam.

But will the country's software entrepreneurs have a future once current Y2K projects are completed?

Dewang Mehta, head of the National Association of Software and Services Companies (Nasscom), which represents most Indian software companies, says the industry has developed enough to flourish beyond 2000. Already, big companies earn

Just air-conditioning the offices of the high-tech sector will require 2,250 MW of power in a country where power blackouts are endemic and force most software companies to rely on back-up generators.

Nirmal Jain, managing director of Tata Infotech, believes companies will only succeed in higher value services if they have expertise in business sectors as well as programming. "We have to build vertical industry capabilities which will help us go up the value chain," he says.

Some companies are planning to develop niche products which do not compete directly with existing market leaders. Others want to develop products that can be sold on to US software giants.

Most are under no illusions about the fierce competition they will face from existing software companies and established global consultancy firms. But they believe they will benefit from two fundamental changes in the IT landscape: the growth of the Internet and the development of e-commerce.

"This is a new market where there is no clear leader," says N. Krishna Kumar, chief executive of Wipro Infotech. He says Indian companies are poised to develop e-commerce systems, content, interfaces, network management, encryption, and business support systems such as on-line billing.

Moreover, the Internet has given the Indian entrepreneur a bridge with which to reach customers, regardless of marketing budgets or geographical distance.

"On the Internet I am just another John," says one of India's top software executives. "No-one can tell I am a brown John."

Many in India believe the software industry is the most powerful modernising force in their country today. It competes with other forces - organised labour, religious fundamentalists, oppressed castes - some centuries old.

How the software industry fares in this contest will shape not only its own success, but the kind of country India will be in the new millennium.

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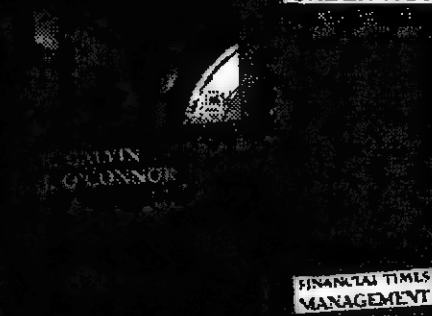
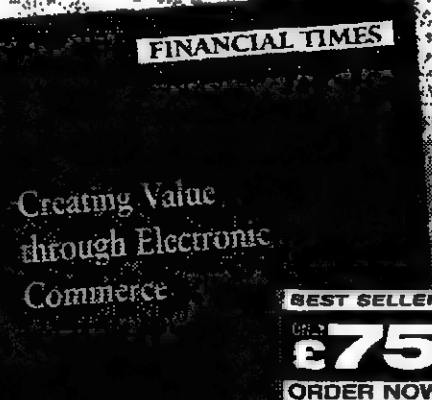
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Monday March 15 1999

A fresh look at jobs for Europe

The absence of Oskar Lafontaine from today's meeting of European finance ministers is likely to create a new dynamic in the discussion of economic policy. But whether the resignation of the former German finance minister results in a sharper focus on Europe's deep-seated problems remains to be seen.

The Euro-11 committee for countries in the single currency area is due to consider several different topics which bear on the problems of faltering growth and high unemployment. Mr Lafontaine was the most prominent of those who saw the solution as a stimulus to demand from lower interest rates and co-ordinated domestic policies.

His view was strongly reflected at the recent congress of European Socialists in Milan and seemed likely to be influential in shaping the "European Employment Pact", which is being prepared for the European Union summit in Cologne in June.

His Keynesian prescriptions gained most support from those who see them as an alternative to the harsher requirements of structural reform. The importance of the latter has been urged by Tony Blair, the UK prime minister, and in a European Commission report to today's meeting of Ecofin, the committee of all 15 finance ministers.

The list of structural obstacles to growth is a long one: it includes excessive regulation, laws on working hours and the

high costs of firing in France, and rigid national wage bargaining structures and excessive regulation - such as on shop hours - in Germany.

In most continental countries excessive taxes inflate the costs of employment and welfare provisions create big disincentives to work.

Although the political cost of dismantling such barriers is often high, there has been a general consensus towards at least some liberalisation. In France, for example, small businesses are being relieved of 37 administrative burdens and some of the complexities of the tax system.

Unfortunately, such impulses are more than counteracted by wrong-headed intervention in the labour market, most notably the imposition of a 35-hour week.

In France, as in much of the rest of Europe, two things are now needed. The first is a re-emphasis of the need for reform. The second should be a recognition that Mr Lafontaine was half right. Europe is suffering from a deficiency of demand.

Fiscal reticence is off the agenda; but the European Central Bank could and should lower interest rates. This would put an end to a disruptive public argument stirred up by Mr Lafontaine and encourage the other finance ministers to return to the harder task of long-term reform. Much needs to be done. There is little time to lose in creating a consensus for action.

Clinton mediates

President Bill Clinton has as good a chance as any intermediary of breaking the impasse between unionists and republicans in Northern Ireland. For Gerry Adams, the Sinn Féin president, Mr Clinton's approval is vital to his political legitimacy. Among David Trimble's Ulster Unionists, distrust of the US president has given way to a certain grudging respect.

So both the British and Irish governments are hopeful that Mr Clinton can kick start the peace process when he welcomes Northern Ireland's leaders at this week's St Patrick's Day celebrations in Washington. Tony Blair wants him to use his considerable leverage over Sinn Féin to press for an early start to the process of IRA arms decommissioning. Bertie Ahern, Ireland's prime minister, hopes that if Mr Adams is willing to compromise, Mr Clinton can persuade Mr Trimble, Northern Ireland's first minister, to accept something short of the immediate destruction of arms.

The deadlock centres on the meaning of the decommissioning clauses in last year's Good Friday agreement. Most of that agreement, including the creation of north-south bodies and a new Anglo-Irish council, is now in place. But it can come into operation only with the establishment of a Northern Ireland executive.

Mr Trimble insists that Sinn

Féin cannot take its place on the multi-party executive unless and until the IRA has begun decommissioning. Mr Adams retorts that the destruction of arms was never a precondition. Unless the impasse is broken by this year's Good Friday on April 2, the whole process risks collapse.

In strictly legal terms Sinn Féin may be right that the settlement does not draw an explicit link between decommissioning and the creation of the executive. But, and Mr Clinton accepts this, it does impose a powerful moral and political obligation on republicans to begin the process of disarmament. If Northern Ireland does return to violence, there will be no doubt where the blame lies.

And in practical terms, were Mr Trimble to accept Sinn Féin into the executive without any movement on arms, he would almost certainly lose the leadership of his own party.

That said, there may be a workable compromise. It requires that Mr Clinton extract assurances that disarmament would accompany, if not precede, Sinn Féin's entry into government. Those promises would have to be credible and detailed enough to win endorsement from the independent decommissioning body headed by General John de Chastelain. To that end, Mr Clinton must apply strong pressure on Mr Adams while seeking to persuade Mr Trimble.

French banking

Hostile takeovers are rare in France. One as large and politically sensitive as Banque Nationale de Paris bid for Paribas and Société Générale is unprecedented. French dirigisme has offered little scope for the crude Darwinian battle of English and American capitalism.

So as BNP breaks the mould, it is important to ensure that the restructuring of the French banking system takes place on a level playing field, under rules which make the interests of shareholders paramount and allow a speedy resolution.

On the positive side, France now has a coherent framework for the conduct of takeovers, thanks to the establishment of the Conseil des Marchés Financiers, the self-regulatory authority set up in 1996, which has drawn up a reasonably transparent rule book. The CMF performed respectably in the 1997 battle between Rallye and Promodès for the retailer Casino and has shown keen interest in the rights of minority shareholders.

But the BNP bid will be its biggest challenge yet, and battles of this kind tend to test the limits of the CMF. It is essential the CMF be seen to be scrupulously neutral, not least because its chief, Jean-François Lepetit, is himself a member of the banking establishment.

That might reduce the chances of the bid ending up in the

courts, which is where aggrieved protagonists in French corporate restructurings tend to seek satisfaction. The banking industry, which needs to reform quickly to face mounting European competition, cannot afford a prolonged legal battle on top of a formal bid process which could last months.

The French government, which blessed the Société Générale-Paribas merger that triggered BNP's bid, seems for now to be restraining its interventionist tendencies, but it could use several channels to influence the outcome.

The takeover needs the approval of a sub-committee of the Banque de France, though it would be hard for it to argue that BNP is not a fit and proper organisation. The government could (and should) examine the competition aspects of the deal, since the merged giant would account for a significant proportion of some markets. Less justifiably, it could apply pressure behind the scenes or, if the bid provoked strong labour opposition, intervene on grounds of national security.

It should hold its hand. Persistent dirigisme has done much damage to the French banking industry over the past 20 years. Apart from reviewing the competition aspects of the bid, the government should stay on the sidelines, and allow shareholders to decide their best interests.

Toshiaki Iba hardly strikes you as a radical. Polite, unassuming and conservatively-dressed, Mr Iba seems the model Japanese businessman. But his personal history would make many Japanese gasp.

Since leaving a secure job with Japan's ministry of posts and telecommunications six years ago he has held seven jobs at seven companies.

His latest, as senior analyst for Tokyo-Mitsubishi Securities, is unlikely to be his last. "I want the number of jobs I have held to reach double digits," Mr Iba laughs.

In Japan's consensus-oriented society, people like Mr Iba used to be the proverbial nail to be hammered back into the board. But job prospects are changing in Japan. Last week, Sony announced plans to fire 17,000 workers - only the latest example of huge job cuts at Japan's big companies that are ending the country's traditions of lifetime employment.

It would appear that Japan is dismantling the army of submissive corporate soldiers who supported its rise to economic superpower. As the country faces a need to restructure its economy, individualists are moving from being distasteful eccentrics to models of hope for renewal.

There are three broad reasons for this. First and most important, there is a growing view that the economy needs to modernise and that it requires new types of workers to do that.

"While labour costs in Japan were cheaper than in the west, it was possible to copy the west and succeed. But now that labour costs are higher in Japan, we must come up with ideas that neither the US nor Europe can come up with," says Haruo Shimada, economics professor at Kato University in Tokyo. "For that, we need people who are willing to take risks and can do something different."

Japan's economic miracle relied on a system that required loyalty from its workers and a collective will to rebuild the nation after the war to catch up with the west.

"Western values" - individuality, creativity - had little place in that order. Corporate salary men, bureaucrats, academics and politicians all had a role to play in "Japan Inc."

In return, Japan's particular brand of post-war socialism promised a degree of social security and equality that was the envy of many industrialised countries. If the US offered equal opportunity and widespread inequalities of income, Japan's social capitalism provided equality of outcome but often unequal opportunities.

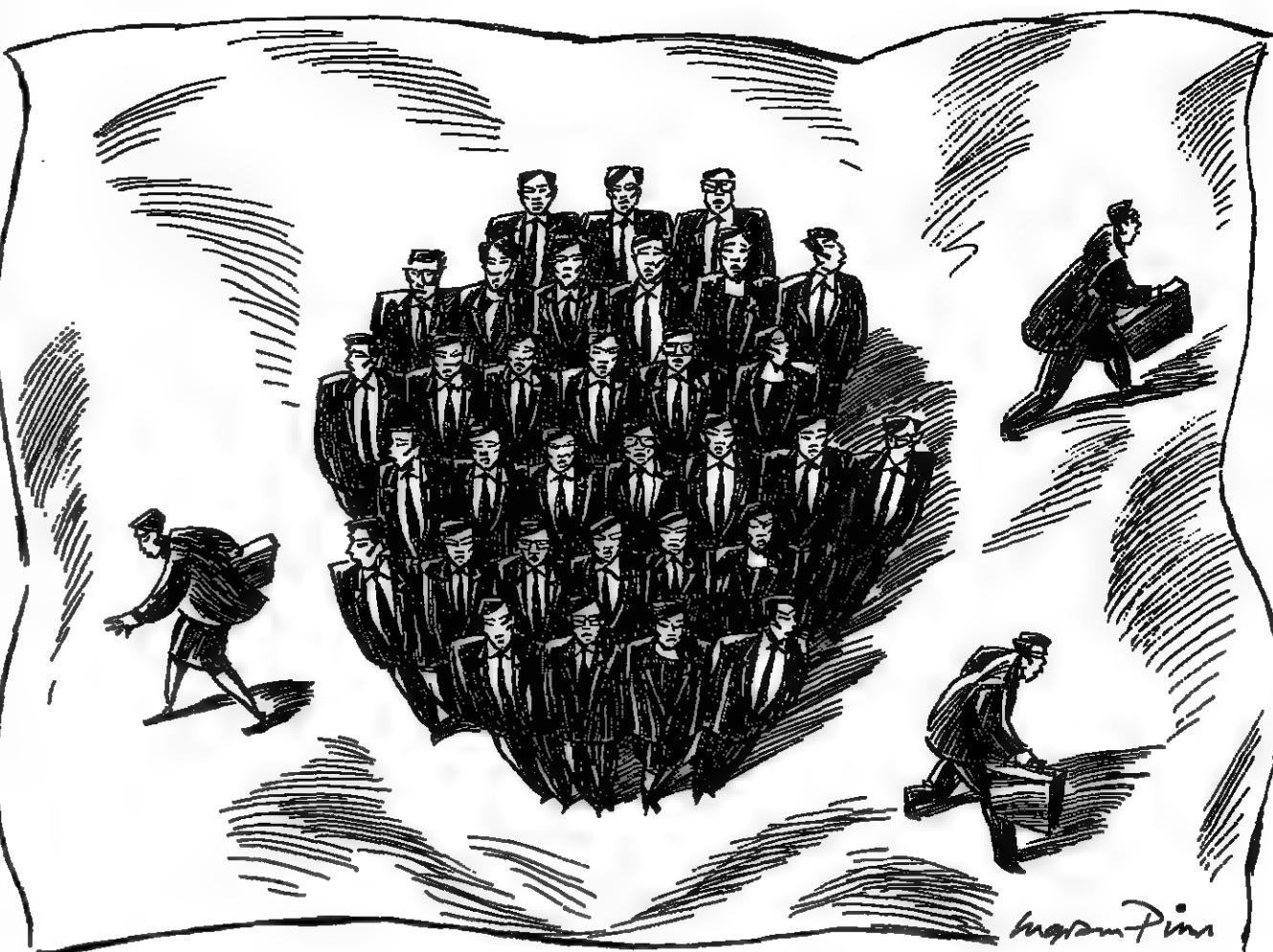
In the digital age, what used to be the strengths of a company like Matsushita - the loyalty and uniformity of employees - have increasingly become weaknesses, says Masatoshi Harada, manager of the personnel section at Japan's largest consumer electronics manufacturer. "It is important to nurture individuality. We want more unusual people with unusual talents to join Matsushita."

At the same time, many Japanese are losing faith in a system that was based on the promise that everyone was working to create a better Japan.

When he decided to become a bureaucrat, Mr Iba believed he would be working for the good of

Leaving the fold

Michiyo Nakamoto meets a new generation of Japanese workers who have forsaken the security of lifetime employment in search of more fulfilling careers



the country. That may have been true when Japan was striving to raise its living standard to the level of the west and the growing economy benefited everyone. But now that the catching up has been done, "the actual work we did had nothing to do with the good of the country. We were serving vested interests," he says.

A graduate of Tokyo University's prestigious law department, Mr Iba recalls that his family was upset and puzzled by his decision to leave the ministry. "But I felt I could not do such a job even if I were paid very well."

For a growing number of young Japanese like Mr Iba, the social values handed down by the older generation ring hollow. If questionnaires are anything to go by, younger Japanese have become more concerned about "personal fulfilment" than even Americans or Britons.

According to a recent poll of 1,000 people between the ages of 18 and 24 in Japan and several other countries, conducted by Japan's Management and Coordination Agency, 29 per cent of Japanese youths think people work to fulfil their potential, against just 7 per cent in the US and 10 per cent in the UK. Only 59 per cent of Japanese said people work to earn a living, compared with 50 per cent in the US and 88 per cent in the UK.

That may reflect the second broad reason why individualists are the new heroes of the Japanese workforce: the relatively recent ending of lifetime employment which, in the US and UK, either ended long ago or was never strongly established.

"When I graduated from college 20 years ago, most men expected to stay in the company they joined throughout their working career," recalls Yuko Sakiyama in the placement section of Waseda University in

Tokyo. But as Japanese companies trim their workforce and even long established companies disappear, "students have changed their attitude towards work. They choose jobs that they feel are satisfying rather than joining a company in order to earn money," she says.

One result of the trend is higher unemployment, as people increasingly seek - and reject - jobs. Official figures for joblessness in Japan put it at a modest 4.3 per cent, although that still is a record. Unemployment among 15- to 24-year-olds was put at 7.4 per cent, according to the Ministry of Labour. But many argue Japan's official figures

underestimate the real figure by,

for example, counting 30-year-olds who have lost their jobs as "retired". Economists put the real unemployment figure at 10-12 per cent of the workforce.

The number of jobless has triggered alarm in some corners, but the more flexible attitude towards job mobility is also a sign that Japan is moving towards the kind of labour market needed to revitalise the economy by encouraging new types of work and new companies.

Although still rare, younger Japanese are keen to start their own businesses and dream of becoming Japan's Bill Gates.

Take, for example, Kazuhiro Ogura, who began his internet marketing and software company while still a third-year student at

Tokyo's Hitotsubashi University. At a time when most of his friends were busy doing interviews with big-name companies, Mr Ogura was too busy running his business to make it to the company visits.

"I thought very seriously about whether I should join a company or continue the business," he says. "My parents were very opposed to the idea of me not getting a job, but I wanted to do something that would have an impact on the Japanese economy."

Although he was a lone figure in a university whose students are widely sought after by top companies, Mr Ogura believes

'Students have changed their attitude towards work. They choose jobs that they feel are satisfying rather than joining a company in order to earn money'

Japan is changing. "Most of my friends do not expect to stay at one company for ever. Many say that they will become independent after a few years."

If Mr Ogura were to join a company, he says he would prefer a small one where he could make a difference, rather than a large company where he would be just one among thousands.

The third reason for the change in Japanese attitudes to work and, more broadly, in the nation's social contract, lies in the increasing participation of women in the workforce.

The division of labour between men and women is slowly, but steadily, breaking down as more women decide to continue working after marriage or childbirth. Nearly 60 per cent of Japanese

women work and the number of female managers, while still a minority, has risen from 190,000 in 1980 to 210,000 in 1998.

After giving birth to a daughter last summer, Mikie Kiyoi returned to her job as director of the international press division at the foreign ministry. "In Kasumigaseki [home to many central government offices] there are many married female bureaucrats with children, especially among the younger generation," she says.

When Ms Kiyoi joined the foreign ministry in 1978, she was the first female bureaucrat to be recruited for two decades. Today, there are three female directors in the ministry, including Ms Kiyoi. "For female bureaucrats, (the ministry's) institutionalised equal opportunities [programme] works positively," she says.

Most Japanese women are less fortunate than Ms Kiyoi. The first victims of the recession were women graduates who could not find jobs as companies cut back on their female recruitment.

By western standards, the pace of change in Japan is excruciatingly slow. After all, in spite of calls for greater individuality by personal managers, Matsushita employees still sing the company song twice a day.

But the modest changes that are occurring in the traditional mind-set may provide Japan's best hope for revitalisation.

"The need the Japanese feel to be the same is the root of many of the country's problems," says Mr Shimada. So, too, is the belief, expressed in an old Japanese proverb, that "it is better to seek shelter in the shadow of a big tree". But Yoshihiko Ohashi, who gave up a 13-year career with Nissan Motor to join a foreign consultancy firm, believes it is a need the country must shake off. He says: "The choice Japan faces is to change or die."

OBSERVER

Do that mandarin thing again

We all know Taiwan's a high-tech, go-getting place, churning out more keyboards, mouses and monitors than the world knows what to do with. What Observer didn't quite grasp is that the island is getting more venerable all the time.

Taiwan's starved of official recognition from most countries in the world, due to a diplomatic rift with a certain large neighbour to the west. But that doesn't mean it can't have any fun.

Last week it rather nicely celebrated the 138th birthday of its foreign ministry, in an attempt to boost diplomatic morale.

Most pundits would link the ministry with the Chinese republic founded in 1912, whose government was later chased off the mainland by the Communists. But tracing back Taiwan's mandarins to the real things of the Qing dynasty makes it all seem much more august.

There's at least one difference though. In the old days, the diplomats were keen to fend off the over-eager attentions of Western diplomats.

Today, that couldn't be less true.

All mod cons

Some condominiums are in suburbs. Others aren't. One of the more surprising examples of

the phenomenon is about to pop up in the Balkans.

Although the word condominium sets Observer thinking of high-rise buildings and tenants' meetings, that's probably due to a woeful lack of a classical education.

Latin scholars can see at a glance that the word implies shared ownership. Indeed, the things have been around for centuries.

The Duke of Holstein and the Dames set up a condominium in the early 1700s, the British pondered another in Sudan at the turn of the century, and until 1980 the far-flung islands of Vanuatu were one under the British and the French.

The latest appearance of the c-word is in the disputed Bosnian town of Brcko, where Nato troops are handing out leaflets to angry Serb residents to explain why it's good to be a condominium.

Back in 1995, as Bosnia's civil war drew to a close, the map-drawers couldn't agree whether the Serbs should keep Brcko, or whether it should be returned to its previous Moslem-Croat majority.

A deal reached this month meant the Serb and non-Serb halves of Bosnia would share Brcko as a condominium.

Most people will have no experience of such an exotic concept. But the burghers of Brcko may be in luck. Because in a previous edition the

American ambassador who runs the Balkan town was envoy to, of all places, Vanuatu.

Mournful silence

Remember Russia's heroic days of summer 1991? Mikhail Gorbachev was confined to his dacha, Boris Yeltsin clambered atop a tank and the exiled cellist Mstislav Rostropovich flew back to Moscow to lend moral support against the hardline coup.

Some people have forgotten - at least Rostropovich thinks so. He's livid at a poor review he got in December and says he'll never play in Russia again.

The cellist bristles at being dubbed a has-been. "It's over," he says. "I don't want my concerts to be a punishment." Russia, he thinks, is full of ingratitude. If you need reminding that the inspiring time when Russia threw off Communism has gone - you just got it.

Heading north

So you thought Canada was squeaky-clean?

The country's reputation for openness took a beating last week in that latter-day arena for international disputes: the World Trade Organisation.

Canada tried to defend subsidies for Bombardier, the aerospace company. The WTO wasn't impressed.

It wasn't just that the Trade Underminers thought all those

sober-suited Canadians were too forthcoming with the filthy lucre. The Canucks, the WTO panel said, just "outright refused" to tell them what they needed to know.

Canada said it risked compromising "cabinet privilege" if it gave up the relevant documents. But what about the country's good guy image? Observer knows there are attractions to playing the strong, silent type. But this might be going too far.

Robin sees red

British foreign secretary Robin Cook is having a torrid time.

First the tabloid press discovered that he'd been involved in a liaison dangereuse, so Cook ditched his wife.

Then he couldn't quite make clear whether he was in favour of arms shipments to the war-torn country of Sierra Leone.

Now the foreign secretary admits he was slipped copies of draft reports by MPs.

Parliament is buzzing with speculation about Cook's future. Some people close to the top have even started musing on what to do should the foreign secretary be fatally winged. If he goes in the summer, word is he could be replaced by the popular Northern Ireland secretary Mo Mowlam. She's got a reputation for fruity language. But nothing compared to Cook's if the whispering campaign continues to gather pace.

Financial Times

100 years ago

The Philatelic Craze Reaches To A Remarkable Extent

A catalogue has been published in London in which the value of every postage stamp is given. In a letter accompanying the little volume, the publisher has sent us some interesting information on the stamp question.

It appears that the total number of all known varieties of postage stamps so far issued by the different governments of the world is 13,811, of which 131 are British and 3,843 belong to the British Colonies and Protectorates.

The United States heads the list as the most prolific producer, with 287 kinds to its credit. Spain comes next with 278, followed by San Salvador with 272, and Uruguay and Shanghai have 215 each.

The rarest stamps are, of course, the most valuable. One Hawaiian stamp is appraised at £800, while two of the earliest stamps of Mauritius and one of British Guiana are worth £1,000 each.

The missed opportunities offered by the waste paper baskets of those who had correspondents in Mauritius some fifty years ago must make the mouths of the office boys of the present day water.

MONDAY MARCH 15 1999

Quarterly review

Consolidation enters more frantic phase

Pharmaceutical companies face increasing pressures to merge, writes **David Pilling**. Among them are expiring patents and the need for increased marketing muscle

High up in a plush office above downtown Philadelphia, a freshly-scribbled wall chart plots the near-endless permutations of merger possibilities in the pharmaceutical industry.

One axis depicts a company's exposure to patent expiry, the other the strength of its drug pipeline. The initials of several companies are dotted across the grid according to their perceived strengths and weaknesses. The chart's author draws diagonal lines across the paper, showing which sets of companies are most likely to merge with which.

The office and chart belong to Jean-Pierre Garnier, chief operating officer of SmithKline Beecham (SB). But they could just as easily belong to any senior executive in any pharmaceutical company around the world. Everyone, everywhere in the drugs business, is talking about one thing: consolidation.

To some extent, that has been true for at least 10 years. Double and triple-barrelled names such as Glaxo Wellcome, Pharmacia & Upjohn, Bristol-Myers Squibb, and Hoechst Marion Roussel bear witness to the merger spree that has already taken place.

But that process appears to have entered a new, more frantic, phase, at least in Europe. At the end of last year, three big European mergers were announced within a few weeks - Sanofi with Synthelabo in an all-French affair; Hoechst of Germany with Rhône-Poulenc of France; and Zeneca of the UK with Astra of Sweden.

Three further mega-mergers collapsed amid recriminations and culture clashes, including American Home Products' planned deal with SB and then with Monsanto. Most significant

was the attempt to unite the two big UK rivals, Glaxo Wellcome and SB. Not only, says Mr Garnier, would that have been the first pharmaceutical merger to marry two genuinely strong companies, it would also have created a group with more than 8 per cent of market share - practically double its nearest rival.

That highlights a contradiction within the industry that colours the consolidation debate. On the one hand, drug companies are gargantuan, making up an eye-popping eight of the world's top 25 companies by market capitalisation. Yet, measured by the scale of the \$250bn prescription drugs industry, pharmaceutical companies are relatively small. Not one has more than 5 per cent of market share.

Pharmaceutical executives like to argue that such logic is simplistic. The drugs market, they say, is not homogeneous, but sub-divided into distinct segments by therapeutic area such as cancer, cardiovascular, or vaccines.

That is true. Even so, Sir Richard Sykes, chairman of Glaxo, is not alone in predicting that the industry will inevitably become more concentrated, with fewer, bigger, companies grabbing a larger slice of sales.

Until now, many pharmaceutical mergers have been driven by weakness. Fast-growing US pharmaceutical companies, with most of their sales in the thriving North American market, have been shielded from taking tough decisions. But smaller European companies, gradually slipping down the league tables and outgunned in research and marketing spend, have been forced to act.

"Mergers happen because companies



have a trough in their product flow combined with some patent expirations," says Sidney Taurel, chief executive of Eli Lilly of the US. "The short-term benefits of a merger - which are rationalisations - can boost short-term earnings." Yet those gains may only be transient.

Dr Taurel argues that - for the moment - the biggest 10 to 15 drug companies have sufficient critical mass: they are large enough to absorb the escalating cost of research and to market their products globally. But as companies below that level merge, he admits, calculations about optimum size could change.

Many of the structural pressures to merge are intensifying.

First, the industry faces a record number of patent expirations. The mighty Merck will lose an estimated \$3.5bn of sales by 2002 as top-selling products go off patent, and Lilly itself must ride out generic competition to Prozac, its highly-lucrative anti-depressant.

Few companies have been able to survive such assaults on their earnings. Glaxo merged with Wellcome in the mid-1990s when its patent on Zantac, the anti-ulcer drug, was running

out. And the looming patent expiry on Prilosec, Astra's record-selling ulcer product, was the main reason it succumbed to Zeneca's charms.

A related reason for mergers, says Peter Goldsborough, senior vice-president at The Boston Consulting Group, is the gap between the high stock market valuations pharmaceutical companies enjoy and their ability to deliver ever-higher earnings. Such concerns are exacerbated by fears that the cost restraints being imposed in Japan and Europe could spread to the US health-care system.

A third factor driving consolidation is the need for more marketing muscle as companies such as Pfizer hire ever-more salesmen and pile more dollars into advertising campaigns. Many European companies do most of their business in flat domestic markets and are under-represented in North America, which accounts for an estimated 60 per cent of drug company profits. Hoechst and Rhône-Poulenc cited the need to build up US marketing clout as a principal benefit of merging.

A fourth driver is arguably the most controversial: the perceived need for scale in research and development. Advances in genomics, bioinformatics,

combinatorial chemistry and high-throughput screening are revolutionary, but such tools do not come cheap. Cap Gemini, a consultancy group, estimates that the cost of bringing a drug to market rose from \$116m in 1978 to \$800m in 1996. It is still rising.

This technological revolution, argue some, is a decisive argument in favour of scale. "I do believe that big is beautiful," says Jim Nield, R&D director at Glaxo. "These technologies cost a fortune and they are all scalable... a merger to me is still really attractive because cash is really good for R&D."

Only up to a point, says Peter Ringrose, president of the Pharmaceutical Research Institute at Bristol-Myers Squibb. Size can bring logistical headaches, too. "There are elements where size helps, but I've yet to be convinced, particularly in drug development, that size really contributes to output," he says. "Some of the most productive discovery groups have not been the largest," he adds, pointing to the European division of Pfizer, which pumped out three-quarters of the US company's

A new surveys series for a 21st century business

Welcome to FT Life Sciences, the first in a regular series of FT surveys which will look at a business sector with an important and growing impact on human health, on man's sources of food and other materials, and on relations with the environment and other living things.

The survey, one of several series now published by the Financial Times on global industries, will trace developments across the fields of pharmaceuticals and biotechnology, looking at the latest scientific and business developments and examining controversial issues - such as the current heated debates over the development of genetically modified crops and animal cloning.

In addition, there will be case studies, profiles and interviews in each issue in which we analyse the approaches being adopted by groups and individuals working within the industry.

In this first issue we examine the forces that have been driving the consolidation of the pharmaceutical industry, and ask whether the wave of mergers will bring the rewards predicted. Also in this issue we examine the latest developments in European biotechnology, a field in which the UK has hitherto led the field but where there are now some signs that other countries may be catching up. Individual articles will analyse what is happening currently in Germany, France, and the UK.

Issues to be published later in the year, provisionally in July and October, will cover a range of topics including health management, Asia's drugs market, the genomics revolution, and the corporate and social implications of the rise in the number of older people in western societies.

We hope that you will enjoy reading this survey and that you will let us have your comments on the opinions advanced and ideas for future coverage. Please write to The Editor, Life Sciences survey, Financial Times, Number One Southwark Bridge, London, SE1 9HL, or send an e-mail to ft.surveys@FT.com

Continued on Page 6

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Hoechst is an international group of companies spearheading innovation in Life Sciences, including Hoechst Marion Roussel the pharmaceutical company, AgrEvo the agribusiness and Hoechst Roussel Vet the animal health company. Hoechst AG, D-65926 Frankfurt, www.hoechst.com

THE US MARKET by David Pilling

Strong demand shows no sign of abating

American companies, some with annual sales growth of 20%, have been largely immune from pressure to consolidate. They are the envy of their competitors across the Atlantic

For at least a decade pharmaceutical sales have been buoyant in the US. While governments in Japan and Europe have sought to rein in drug budgets, and the potential of Asian and Latin American markets has been stalled by financial crises, pharmaceutical sales in the US have roared ahead. Not even the managed-care revolution, ushered in under the Clinton administration, has curbed drug sales to America's ageing population.

According to the latest data from IMS Health, US prescription drug sales reached \$74bn in 1998, nearly 40 per cent of the total market. Prices, especially for new products, are better in the US, leading Goldman Sachs to estimate that drug companies derive at least 60 per cent of their profits from North America.

The strength of US drug sales has two main implications for consolidation in the industry.

First, it explains one motivation behind recent European

mergers and raises the prospect of more to come. Companies which sell the bulk of their products in flat European markets - where price and volume are strictly controlled - are falling further behind their US rivals. Virtually all the recent mergers have taken place between second-tier companies. It is no coincidence that most of those are European-based.

Neither is it surprising that, in two of the recent mergers, executives have stressed the potential for an expanded US salesforce to increase sales in the world's most lucrative drugs market.

Second, uninterrupted growth in the US helps explain why American pharmaceutical companies have been largely immune from pressure to consolidate. Cutting costs hardly seems a priority for companies with annual earnings growth of 20 per cent.

Given the positive performance of the pharmaceutical stocks, managements haven't

had to focus on external means of value creation," says Clinton Gartin, a managing director at Morgan Stanley, which has been highly active in the consolidation of the drugs industry. "If the stocks in the sector begin to soften I would expect to see managements change their focus and pursue transactions aggressively."

Those implications for European and US companies lead to two further questions. Will scale bring the Europeans the greater US market share they crave? And how long can US companies rely on ever-increasing domestic sales?

The first is easier to answer. Greater scale will not automatically mean better sales unless European companies launch competitive products and sharpen their understanding of the US market.

US companies dominate their domestic market. In worldwide sales no company has more than

a 5 per cent market share; but the US is much more concentrated. According to Cap Gemini, a consultancy firm, the top five companies have 31.3 per cent of sales, with Merck grabbing 7.4 per cent of market share, and Johnson & Johnson and Bristol-Myers Squibb a further 6.2 and 6.1 per cent respectively.

Of the European companies, only Glaxo Wellcome, SmithKline Beecham and Novartis make it into the top 10.

Nor are the market leaders resting on their laurels. Pfizer, Merck and several other US companies have been adding aggressively to their sales forces. Europeans will have to do the same if they are to make an impression.

So important has marketing muscle become that even Searle, the medium-sized drugs division of Monsanto, has signed a co-marketing deal with Pfizer to share the spoils of Celebrex, Searle's probable blockbuster drug for arthritis.

Analysts say not all European companies have proved adept at exploiting the complex US market. Not only must they persuade physicians to prescribe their product, they must also convince managed-care organisations to reimburse it, and pharmacy benefit managers to recommend it. They need to discount, give away free samples and, increasingly, to create patient demand through direct-to-consumer advertising and Internet presence.

Gone are the days when drug companies merely had to release new drugs on the market, says Jean-Pierre Garnier, chief operating officer at SmithKline Beecham, the Anglo-American company. "We are seeing a greater separation of winners and losers than 10 years ago. They all used to be fairly successful; now some are widely successful, some not at all."

Only products that can demonstrate significant cost benefits do well, a process that may involve

designing enormously expensive clinical trials known as outcome studies.

That leads to the second question. How long will the good times last? Mr Garnier is among those who believes it would be dangerous to be blasé. "The market is getting harder. Managed-care is exercising more muscle," he says.

Many analysts believe that managed-care could begin to crack down on the drug companies, refusing to reimburse products unless they are proved to have a real economic benefit.

However, a public opinion backlash against managed-care could restrain it from playing too tough. There is also evidence that many managed-care groups have been persuaded by "pharmaco-economic" arguments that spending more on drugs cuts the total healthcare bill by reducing the need for hospital care.

The industry is also waiting nervously to see the outcome of

planned reform to the Medicaid and Medicare systems, the government programmes for the poor and elderly. Reform could seek to curb rising drug costs, but the effects could be watered down during the run-up to the presidential elections.

One US-based investment banker believes the climate will get harder for drug companies. "Business has been a little too good for too long, but that's going to change. The stocks look pretty topsy right now."

Analysts have long been predicting the demise of the US market. So far they have been proved wrong.

Industry executives, however, are constantly looking over their shoulder. "If the US market turns against the pharmaceutical industry," says Mr Garnier, "it will have a devastating effect on our companies' value."

If that happens, investment bankers will start circling with even more intent.

NICHE PLAYERS by David Pilling

Strategy for survival

Some industry minnows may be forced into merger or be taken over, but for others small may remain beautiful

Right down to the enormous fundadelle carpet in the lobby of its Berlin headquarters, Schering feels different from other pharmaceutical companies. Friendly, relaxed, informal, Schering is the type of place where employees buy wine in the company store or drop their children off in the adjacent kindergarten.

It is not only the atmosphere that marks it out from many other pharmaceutical companies. It is also its size. For Schering, which has annual sales of about DM8bn and a market capitalisation of less than \$10bn, is a minnow in a world of \$100bn sharks.

Although the German group is categorised as "big pharma" - industry jargon

for the mighty and the powerful - in valuation terms it is only one-third the size of Amgen, a Californian biotechnology company.

That puts it in roughly the same league as companies such as Ares-Serono (Switzerland), Novo Nordisk (Denmark), and Merck (Germany). The pharmaceutical divisions of Bayer and BASF, nestled in chemical conglomerates, are not much bigger. Nor does Searle, part of the Monsanto life science group, have the financial muscle of bigger rivals, although its recent launch of a Cox-2 inhibitor, a likely blockbuster, should help.

The gap between the tiers is widening. Six companies from division two - Zeneca and Astra, Hoechst and Rhône-Poulenc, and Sanofi and Synthelabo - have sought to gain scale through merger. Executives talk with increasing urgency about the need to spend more on R&D and marketing.

As consolidation takes hold, the question is: can Schering and companies like it survive? Is there, in other words, a niche strategy?

Giuseppe Vitta, chairman of Schering, insists there is. "The pharmaceutical market is not unified. Rather, there are 100 or so sub-markets," he says. "If you succeed in being number one in two or three of those segments, you can have a pleasant life as long as you keep innovating."

Certainly, the \$350bn market in prescription drugs is fragmented. Sales forces specialise in different areas such as neurology, oncology, or diabetes. Even the biggest research operations bone in

on particular disease areas. Competition between drug companies is often more evident within these market segments than across the industry as a whole.

"We are only active in about 4 per cent of the pharmaceutical market, but in the niches where we are present we are extremely successful," says Klaus Pöhl, vice-chairman of Schering. The company concentrates on hormones and fertility treatment; diagnostics; and multiple sclerosis.

Nevertheless, many companies of Schering's size will be forced to club together in search of scale, or will become takeover targets.

Peter Goldsborough, senior vice-president at The Boston Consulting Group, says companies that concentrate on core capabilities may be able to pursue an independent strategy. As consolidation runs its course he expects to

How they size up: the big league and the smaller players			
Company	Market cap (\$bn)	Company	Market cap (\$bn)
Merck	188.0	Zeneca ¹	38.5
Pfizer	173.8	Amgen ²	32.3
Bristol-Myers Squibb	125.7	Monsanto	21.8
Novartis	122.9	Pharmacia & Upjohn	27.5
Rhone-Poulenc	118.9	Bayer	24.7
Glaxo Wellcome	114.6	Hoechst ³	24.6
Schering-Plough	105.0	Sanofi ⁴	23.8
Schering-Plough	82.8	Roche ⁵	18.9
American Home Products	82.0	Rhône-Poulenc ⁶	18.8
SmithKline Beecham	80.7	Synthelabo ⁷	10.8

Source: Goldman Sachs

* At May 10 1999. L23: Pöhl to merge

see "a smaller number of bigger companies and a whole array of smaller organisations which are all more focused".

"The basic question for some of the smaller players is to think about how to focus. That may be a focus around a particular technology, around a particular market or around a particular capability such as developing products or manufacturing," he says.

Although this does not mean a small company must concentrate wholly on doing just one thing, "it is likely

that fully-integrated players are going to need to be big in order to be economically viable".

Those which stay small will probably rely more heavily on outsourcing. Biotech companies provide basic research, enabling technologies and drug leads; contract research organisations run clinical trials; other companies manufacture drugs, and yet others market them. The trick is to decide what to focus on. The danger is what Mr Goldsborough calls "hollowing out" - throwing the competitive

baby out with the out-sourced bathwater.

Mads Ovilsen, chief executive of Novo Nordisk, a Danish company specialising in diabetes, believes there is a future for small companies. "Our strategy is to try to remain independent," he says. "You have some advantages being small - flexibility and speed, but you have to compensate for lack of size in areas where the big boys have an advantage."

That means marketing partnerships where necessary and a network of alliances with biotech companies and academic institutions. "More than 25 per cent of our discovery has been shifted to other peoples' laboratories."

Even Novo Nordisk, which is protected through the Novo Foundation from hostile takeover, is not immune from market pressures. The company, which saw its share price drop sharply at the end of last year, has been forced to restructure its portfolio, spinning off non-core activities.

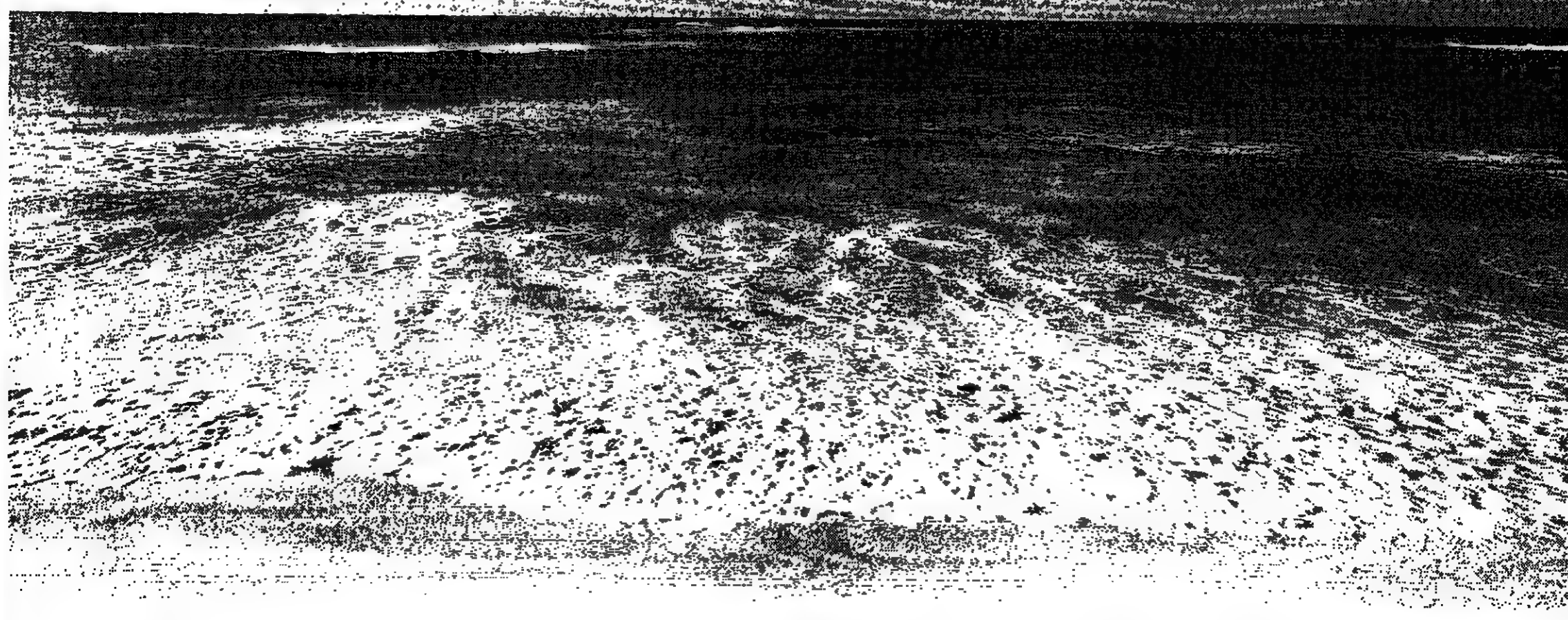
Novo Nordisk is not alone among the smaller companies in being protected from takeover. Others, such as Ares-Serono, are shielded by family ownership or, like Bayer, by a grab-bag of non-pharmaceutical activities.

But such protective walls can only withstand so much external pressure. The Wellcome Trust allowed Glaxo's takeover of Wellcome to proceed in the mid-1990s. And Hoechst's management decided to sell chemical and other businesses in preparation for its merger with Rhône-Poulenc.

Schering last year changed its statutes, making a takeover more feasible. If an offer were high enough, executives admit, they could not prevent shareholders from accepting it.

"There are a lot of medium-size companies out there. And I can believe that, in future, some of those will merge," says Dr Vitta. "We are not yet at the end of history."

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Handwritten signature: "W. Sterling"

R&D by Clive Cookson

Development times static

Disappointment over the flow of new drugs may soon disappear; studies suggest a faster rate of NMEs is just around the corner

In 1981 the pharmaceutical industry spent just over \$500 on research and development. Last year R&D expenditure by the established drug companies broke through \$400bn, and the emerging biotech companies spent another \$9bn.

Few other industries have increased their R&D budgets as fast as pharmaceuticals, and none – not even computing or electronics – relies so heavily on its scientists. Most large drug companies spend more than 15 per cent of their sales revenues on R&D.

Unfortunately, the rise in real resources allocated to research has not produced a corresponding increase in the flow of new drugs on to the market – or at least, not yet. The UK-based Centre for Medicines Research International (CMRI) reports that only 35 "new molecular entities" were launched on the world market in 1998, the lowest total since 1978. (NMEs are new drugs rather than reformulations of existing products.)

Indeed, there has been a downward trend in drug

launches since the mid-1980s, when CMR consistently recorded 50 to 60 NMEs per year. To some extent, these figures may exaggerate the decline in R&D output because the industry in the 1980s was prone to develop "me-too" medicines – designed to imitate and cash in on successful drugs already on the market. Today's new products are more likely to be genuinely innovative.

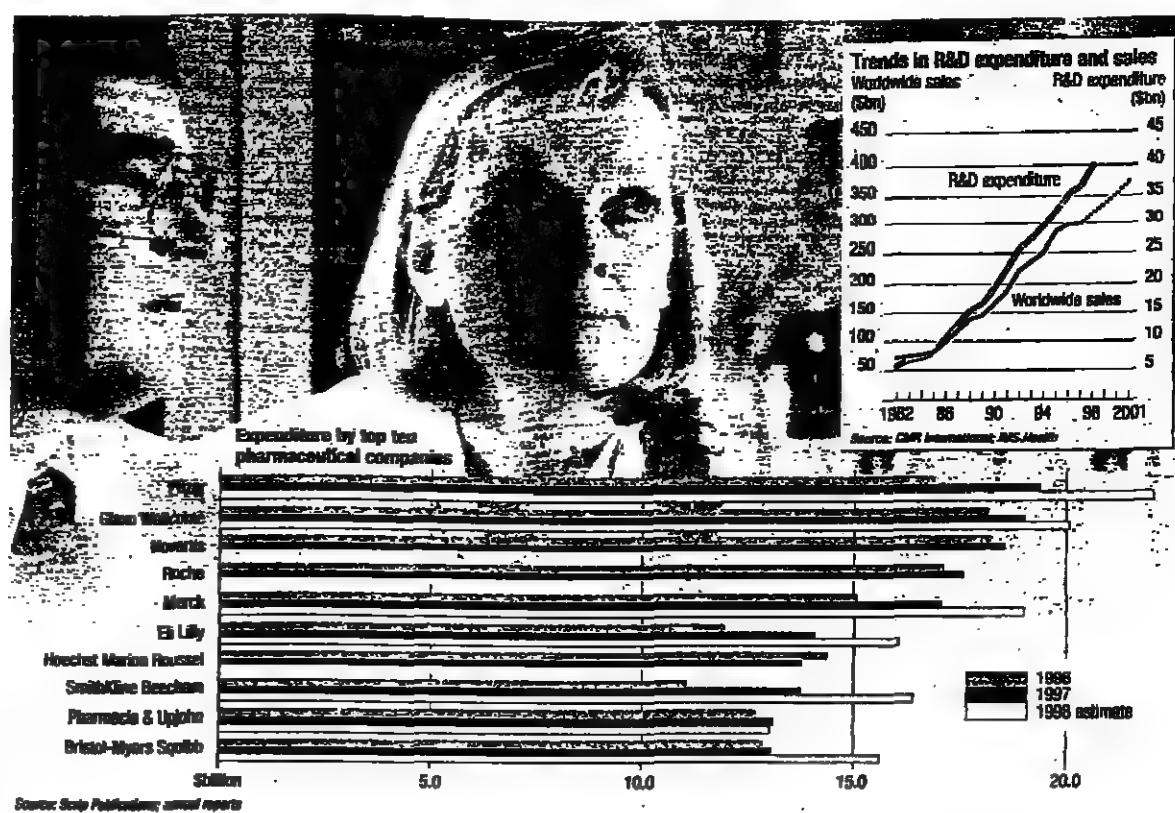
Even so, it is disappointing that we have not yet seen a sustained upturn in drug introductions, which senior pharmaceutical researchers have been forecasting for several years. The benefits of new technologies – such as genomics, combinatorial chemistry, high-throughput screening and bioinformatics – and better management are taking longer to feed through the R&D pipeline than optimists had expected.

The average development time for drugs (the period from isolation or synthesis of a new molecule to the date of first marketing) has remained stuck at 10 to 12 years since the mid-1980s,

according to CMR. This finding surprised delegates at an international meeting held last year to discuss the data, given the industry's strenuous efforts to streamline clinical trials and the fact that most regulatory authorities have accelerated their approvals process.

The reasons why development times remain disappointingly static are not clear. Possibly, new technologies that will save time in the long run cause delays in the short term because they require researchers to learn very different ways of working. For example, the traditional role of a medicinal chemist – synthesising pure compounds one by one – has changed radically now that the process has been miniaturised and automated so that thousands of compounds can be made at the same time.

Biotechnology enthusiasts may also have underestimated the technical complexity of the new genetic targets. At the same time, a different attitude is required to manage a research programme in which the tradi-



tional shortage of biological targets for drug discovery has suddenly become a glut.

The CMR's analysis suggests that the largest companies are making better use of the new R&D environment than their smaller competitors – a possible incentive to merge. Until 1992, there was no correlation between company size and development time; since then, the performance of large and small companies has diverged, so that the top 15 spenders on

R&D take almost two years less on average to develop a new drug than the rest of the industry.

However, detailed studies of the industry's R&D pipeline suggest that a more substantial decrease in development times and increase in new drug launches are around the corner. Stuart Walker, CMR director, forecasts that the top 12 R&D spenders will introduce products at an average rate of 1.6 NMEs per company per year

over the next few years – double the rate of the past 10 years. Whether the largest companies will be able to deliver on promises to deliver two to three new drugs a year remains to be seen.

The pharmaceutical industry as a whole had 11,307 R&D projects last year, according to the Pharmaprojects database maintained by PJB Publications, publishers of *Script*, 3,636 of these were in clinical development. The

largest therapeutic category was neurological with 13.4 per cent, followed by anti-cancer (11.5 per cent) and anti-infectives (9.0 per cent).

When the industry's R&D pipeline is broken down by company, the database shows Novartis of Switzerland in the lead with an astonishing 208 R&D projects in progress last year; the company itself says the total is 186. Hoechst Marion Roussel of Germany is in second place with 132.

Such large numbers could be a sign of research strength or of management weakness – not being ruthless enough to kill enough weaker projects and concentrate resources on the most promising leads. Pfizer of the US, the industry's biggest R&D spender and the company judged by many analysts to have the strongest development pipeline, runs just 65 projects.

A substantial increase in R&D output is likely to require even larger R&D budgets in the medium term, as companies push more drugs through clinical trials. The pharmaceutical analysts at Lehman Brothers believe that R&D expenditure will rise to 18 per cent of sales after 2000.

However the R&D cost per compound will begin to fall as more drugs move through the pipeline. At present the total cost of bringing a new medicine to market is staggeringly high. Lehman Brothers estimated the average at \$600m for a drug whose development started in 1995, of which \$170m is the cost of the drug itself and the remainder is its share of the money spent on other compounds that failed during the R&D process. The overall cost will fall over the next 10 years to \$450m per successfully marketed NME, according to Lehman.

● The 1999 Pharmaceutical R&D Compendium, produced jointly by CMR International and Script Reports, costs £7,495 for four volumes. Phone: +44 (0)181 332 8964.

MERGERS by Virginia Marsh

Marriages tend to be short on bliss

Consolidation is leading to mega-mergers, but some observers believe alternative measures may offer better value

With the merger of Astra and Zeneca imminent, and Hoechst and Rhone-Poulenc rolling their life sciences businesses into Aventis, consolidation of the pharmaceuticals sector continues apace. But while stock markets often react favourably, research by consultants suggests the majority of mergers fail to deliver value in the longer term.

Many consultants say the industry is suffering from a "big is better" syndrome, seeing mergers as a panacea for the problems created by patent expiries, greater competition, the rising costs of developing drugs, and increasing pressure on healthcare budgets.

"The 'we're one step away from a blockbuster' mentality permeates the sector," says Raymond Hill, a vice-president at consultants A.T. Kearney. Instead of diversifying through mergers, he argues, companies should focus their portfolios and try to achieve positions of dominance in particular therapeutic areas.

Using an economic return model – which adjusts earnings by capitalising R&D investments over 10 years, and selling and marketing of products over three years – Kearney says mega-mergers have so far failed to increase the combined economic return of the predecessor companies. On this model, Schering-Plough, Johnson & Johnson, and Pfizer, companies that have eschewed big mergers, come out on top.

Their stock market performance has also been impressive – Pfizer, for example, has outperformed the world pharma sector by more than 200 per cent over the past decade – and it was well ahead of its peers even before Viagra, the anti-impotence drug.

Shares in SmithKline Beecham, an Anglo-American merger, have outperformed the world sector by a more modest 25 per cent over the same period, and the group is ranked near the bottom of the 15 big pharmaceutical companies Kearney surveyed, as are Novartis and Pharmacia & Upjohn, also products of mergers.

Glaxo Wellcome, formed through Glaxo's \$9.1bn hostile takeover of its UK rival in 1995, now has a market capitalisation of \$72bn, compared to the companies' combined \$26bn before the merger, but – together with Bristol-Myers Squibb, an all-American merger of 1989 – it is only in the middle of Kearney's value creation rankings.

This method of assessing value ignores the issue of what would have happened to some companies if they had not merged. Glaxo and Wellcome, for example, both faced important drugs coming off patent.

Earlier deals such as the merging of SmithKline Beecham of the US and the UK's Beecham in 1988 were also driven partly by geography – European companies felt they needed a stronger presence in the US, the world's largest healthcare market. But some consultants say that while SB benefited from putting Beecham products such as Augmentin, an antibiotic, through its US arm's sales network, the group neglected a fundamental problem, its pipeline, which is now considered weaker than some of its rivals.

As in other sectors, some deals have been too ambitious, over-stating the likely cost savings and synergy benefits. The immediate effect of the merger in late 1996 of Pharmacia of Sweden and Upjohn, a US rival, for

A common failure in mergers is for companies to pay too little attention to the intangible assets

example, was a series of profits warnings and the departure of the chief executive. Rather than growing, the profits of the combined entity fell.

As in the IT sector, an issue particular to drug company mergers is dealing with the many highly-qualified employees. "A common failure is for companies to look at the physical assets of a merger, the real estate and the products, and to pay too little attention to the intangible assets, the all-important intellectual capital which lies in the people," says Richard Findlay, a vice-president at A.T. Kearney.

Barrie James, of Pharma Strategy Consulting, adds that competitors are often quick to act. "They nip in quickly and try to pick off the best people. Companies can then have difficulties restocking talent. People know where there are problems," he says, citing Novartis (the Swiss company formed from Ciba and Sandoz) as an example.

In other cases, companies have become unstocked through their own generosity. Executives at Glaxo

Wellcome admit the group lost some staff it would rather have retained – many were seduced by the size of the redundancy package.

Paul Hemsley, an ex-Wellcome employee, now a consultant at Ernst & Young, says that while much attention is often devoted to filling top management positions, companies have often failed to identify key staff elsewhere.

"They haven't looked low enough in the new organisation. The key scientists can often be at a relatively junior level," he says.

The business culture of a life sciences company, including creating the right environment for R&D, is critical – and often underestimated, says Pharma Strategy's Dr James.

Bill Casrell, chief executive of Nycomed Amersham, the Anglo-Norwegian diagnostics group, says: "Before our merger I knew countries had cultures but I didn't fully appreciate the extent to which companies do too."

The former Amersham executives, he says, came from a small company background where cash was always tight; at Nycomed, managers were more used to having financial resources to deploy when problems arose.

At the same time, some mergers have disappointed because they have tried to keep everybody happy and ended up lacking a common culture or a clear sense of direction.

Pharmacia & Upjohn, for example, initially kept on its previous corporate headquarters and created a new base in a neutral location, the UK.

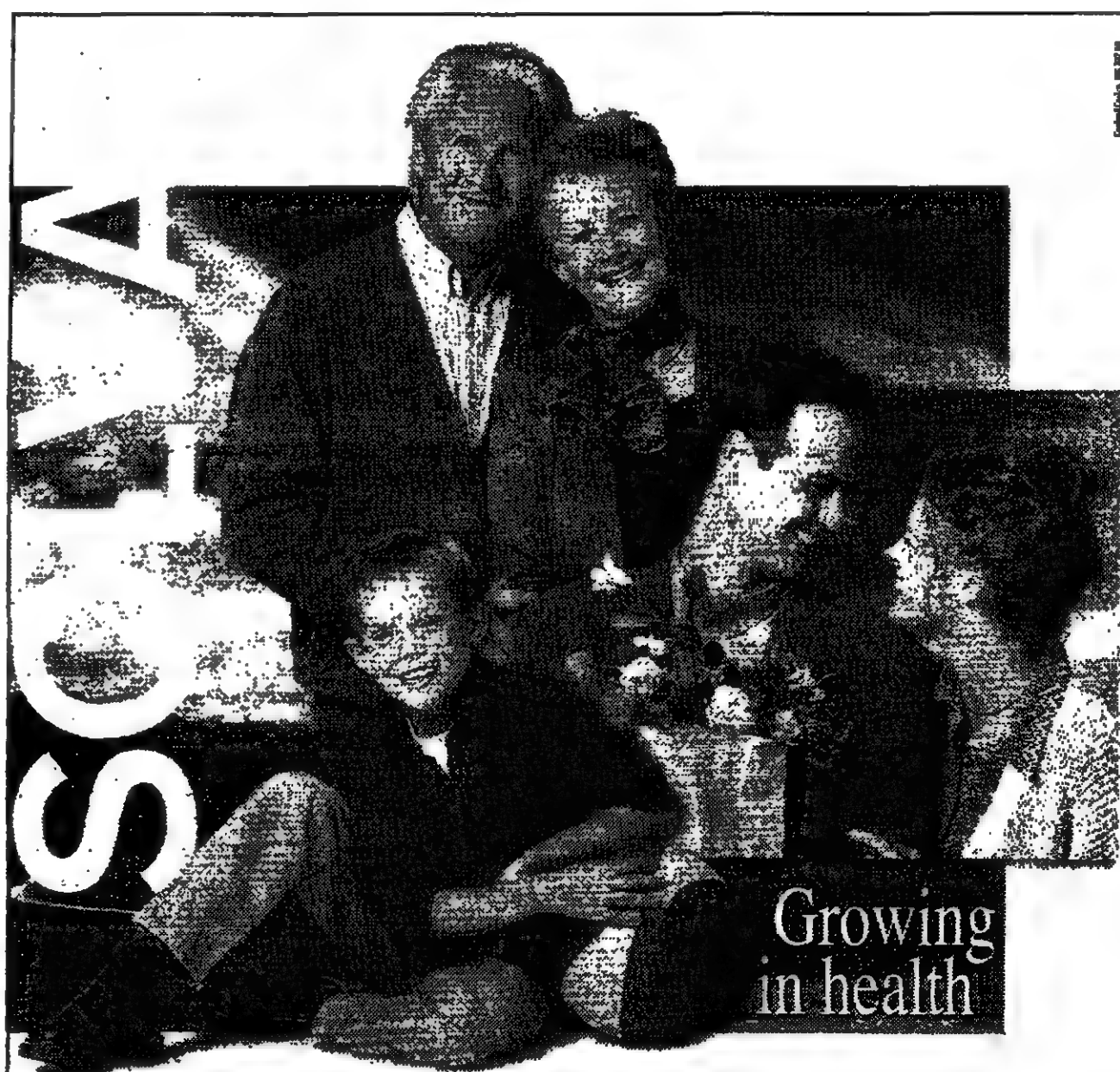
"People were working in different time zones for different pay and with different holidays. They never really merged," says Dr James.

Settling down an organisation after a merger can take years.

Insiders at Bristol-Myers Squibb, which recently appointed its third head of European operations in less than two years, say the company, formed in 1989, has still not achieved management stability, and talk of "a revolving door management".

Dr James says that while big pharma companies have been distracted by merger mania, the source of innovation has been shifting away from them: "The range of technology is too broad and deep for companies to keep up. Their expertise can decline very rapidly because the pace of change is so great."

Rather than contemplating mergers and all the upheavals these involve, he says, the big companies should be focusing on outsourcing and forming alliances with the biotech and smaller pharma companies that are pioneering many of the changes.



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THE INDUSTRY IN 2010 by Sir Richard Sykes

Beyond the millennium

What can we look forward to in 2010? The twin drivers of change – scientific and technological advance and economic pressures – will continue to have a marked influence on our industry and its operating environment. Indeed, the pace of change can be expected to quicken. But by 2010 will it be a case of promise fulfilled or promise thwarted?

Some things can be predicted with some certainty. By 2010 we will be realising the fruits of the scientific revolution that is today unfolding. The knowledge and understanding of human genetics will have transformed our whole approach to the recognition and treatment of human diseases, including such scourges as Alzheimer's, heart disease, and many types of cancer.

The understanding of the genetic basis of many diseases, already well advanced, will have delivered unrivalled opportunities for improved diagnosis and treatment. We will have increasingly established that many existing conditions that today are diagnosed and treated as if they were virtually the same disease, such as diabetes, in reality comprise numerous separate diseases.

We may not have reached the stage of individual patient-targeted therapies; but broad patient sub-groups will certainly have been classified. For these, the success of targeted therapies will be dramatically higher than we are used to.

The scientific revolution will be associated with a transformation of information networks involving all the key constituents in the healthcare sector from scientists through to the general public. Worldwide growth of Internet usage will give ordinary citizens access to an enormous range of information in terms of disease awareness and new therapeutic opportunities. In many areas patients could be almost as knowledgeable as their doctors about their conditions and treatment.

The pharmaceutical industry must play a leading part in the transfer of learning from genetic and other pharmaceutical research through to medical practice and patient understanding.

This will certainly involve the pharmaceutical industry in a major knowledge transfer to healthcare professionals – the traditional audience for the industry. But it is also likely to encompass further direct communication by the pharmaceutical industry to the public.

These new pharmaceutical opportunities will force a substantial change in economic policy towards healthcare expenditure. In many circumstances pharmaceutical therapy is already known to be the most cost-effective way of treating and preventing disease. I am convinced that by 2010 – and, with luck, much earlier – pharmaceutical intervention will have become acknowledged as the key investment in the long-term health of the population.

Economic evaluations of healthcare will take an increasingly holistic approach which will assess the impact of pharmaceutical therapy on the whole healthcare sector – and in many cases the whole economy.

This transformation of approach towards the financing of pharmaceutical usage, prompted by the wealth of scientific opportunity, will also lead to a reassessment of the relative contributions of public and private financing of healthcare. I expect that governments in the western world will need to redefine the responsibilities of the state in this area.

It seems to me inevitable that a greater share of private funding – from private insurance as well as from individual patient purchase – will drive the evolution of new funding systems, and that during the next decade we will see a significant debate on this issue, leading to funding reform. I do not doubt that a state "safety net" or minimum guaranteed healthcare provision will remain; but I do expect that greater patient empowerment will go hand



Sir Richard Sykes: chairman of Glaxo Wellcome

In hand with greater patient financial involvement and responsibility.

So what kind of pharmaceutical industry will we see by 2010? I am convinced that it will be very different. The financial resources required to invest in the new diagnostic and therapeutic technologies, at a time when payers are squeezing revenues on the historic technologies and therapies, will result in fewer major companies.

No longer will the largest company account for just 5 per cent of the global market – as it does today. There are still significant economies of scale to be achieved.

But, despite this, I don't believe that any one company or small group of companies will be capable of monopolising the enormous growth of scientific knowledge and understanding that will have occurred over the decade.

Alongside the pharmaceutical leaders, a transformation of information networks involving all the key constituents in the healthcare sector from scientists through to the general public. Worldwide growth of Internet usage will give ordinary citizens access to an enormous range of information in terms of disease awareness and new therapeutic opportunities. In many areas patients could be almost as knowledgeable as their doctors about their conditions and treatment.

Not only will the pharmaceutical industry be transformed in structural terms, its geographical configuration will also change significantly. Despite the downturn in Asia in the late 1990s, I believe that by 2010 it will have been clear that the Asia-Pacific region does indeed represent an economic powerhouse for the 21st century. The pharmaceutical industry will respond accordingly.

The fact that effective patent protection is now increasingly being enacted in emerging economies will give confidence to the pharmaceutical industry to invest in these markets. That will increasingly include investment in research and development activities.

Today, around 80 per cent of the pharmaceutical industry is based on the needs of the developed markets; by 2010 I suggest we will see a situation in which today's developed and developing regions are seen as more clearly equal components of the global pharmaceutical market.

I do also hope that by 2010 our industry will have built on the foundation of early promising partnerships with WHO, UN agencies and governments to bring about real progress in the widespread treatment of disease that continues to ravage the developing world such as malaria, HIV/AIDS-related diseases, and tuberculosis.

The next decade has the potential to bring more significant change to the products, markets and structure of the biopharmaceutical industry than any previous period in history. The pharmaceutical industry now has the opportunity to capitalise on a scientific revolution in genetics to achieve a revolution in its relationships with all the constituents of the healthcare sector – with medical practitioners, with financing agencies and, most importantly, with patients.

BIOTECHNOLOGY OVERVIEW by David Pilling

One continent, two experiences

The UK's more mature industry is suffering from an investor backlash, while continental Europe's emergence provokes excitement

Why is Herman the transgenic bull worth three times Dolly the cloned sheep? The answer is that Herman belongs to Pharming, a continental European company, whereas Dolly is the creation of PPL Therapeutics, part of the depressed British biotechnology scene.

Pharming, which like PPL manufactures human medicines in animal milk, last year raised \$75m in a stock market flotation that valued the Dutch company at \$175m. Meanwhile, PPL had to go cap in hand to investors in search of new funds, offering them a 30 per cent discount on its already weather-beaten price.

The contrasting experiences of the two companies reflect the divergent states of UK and continental European biotechnology. The more mature UK sector is suffering an investor backlash as investors learn how hard it is for biotechnology companies to turn bright ideas into profits. Continental Europe, by contrast, is enjoying a boom, with many investors wooed by the groundbreaking science and intriguing investment opportunities offered by biotech.

The birth of European biotechnology follows a 15-year period when the industry grew strongly in just two countries: the US and the UK. Although continental Europe boasts several world-renowned scientific institutions, such as Germany's Max Planck Institute, biotechnology as an entrepreneurial culture never really took hold.

That is until now. In the

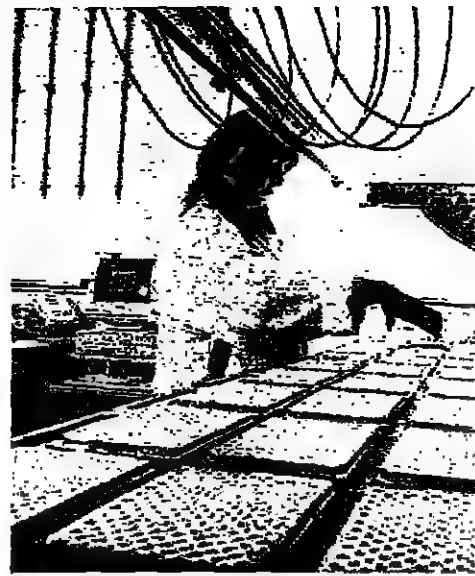
past few years, rising unemployment, a nascent share-owning culture, and a shift in government and public attitudes have created an environment far more conducive to biotech. From Munich to Jerusalem, from Paris to Copenhagen, and from Berlin to Reykjavik, biotechnology companies are sprouting up as scientists catch the entrepreneurial bug.

Although continental Europe still has fewer listed biotech companies than the UK alone, private start-ups are coming thick and fast in Germany, France, Scandinavia, and elsewhere. As second-tier stock markets such as Easdaq, the Neuer Markt, and the Nouveau Marché gain credibility, venture capitalists are more willing to bankroll early-stage companies, knowing there is a potential exit for their investment.

"In a very short period of time we have seen an explosion of company creation," says Robert Zegelaar, partner at Atlas Venture. "There is world-class science, and there are now world-class companies in Europe."

The surge in activity has been most apparent in Germany, which for years shunned biotech as scientists stuck to safe jobs in academia or "big pharma", and the public put its economic faith in traditional industries. Then, in 1985, Jürgen Rüttgers, science minister, transformed the landscape by offering government funding to the regions that best promoted biotech.

Almost overnight, the sector became respectable not



The European divide
Released Dec 31 1997

only in "winning" regions such as Munich – now one of Europe's most important biotechnology clusters – but also in those, such as Berlin, that failed to qualify for BioRegio D-Mark. Since then the number of start-ups has doubled each year, to more than 300. This year, several companies are expected to list on the booming Neuer Markt.

France, initially ahead of Germany in establishing well-respected companies such as Genetec and Transgene, has also begun to push biotech harder. Although it has not taken the German route of offering generous federal and state subsidies, the French government is changing tax and other laws with the aim of making it easier for early-stage companies to flourish.

Elsewhere, biotech is also taking hold as companies such as NeuroSearch in Denmark, DeCode (Iceland), Biotech General (Israel), and InnoGenetics (Belgium) establish themselves as

national pioneers. Often, though not always, they have done so with official encouragement.

Government championing of biotech has provoked British envy. "We're just not seeing the initiatives for supporting biotech that we're seeing in France and Germany," says Nick Woolf, biotech analyst at BancBoston Robertson Stephens. "In terms of numbers of companies, Europe will catch up with the UK very swiftly."

In the US, where investors have wielded biotech, it has not gone unnoticed that European companies have easier access to finance. "Continental European companies that are the equal of others around the world have done better because they have a more patient investor base," says Steve Burrill, head of the US private merchant bank that bears his name.

Not that everything is rosy in Europe. Before Morphosys successfully floated in Germany this month, both Phy-

they were listed on an international exchange like Nasdaq," says Mr Woolf.

Many investors also worry that, because of the flurry of corporate creation, it may be difficult to find managers with the experience to guide early-stage companies through to profitability. Unlike in the UK, where at least two companies are likely to receive US regulatory approval for their products this year, most European companies are years away from the market.

"There's a lot of 'two professors with an interesting idea' disguised as companies," says Mr Burrill. "And that's a risk."

Helmut Schüßler of TVM, a German venture capital group, believes that European companies will have to merge in order to gain the necessary critical mass. He would like to see national high-tech stock exchanges fold into a Europe-wide market in order to hasten that process.

The healthcare and technology division at Nomura Corporate Finance, which invests in early-stage companies, recently engineered the merger of Shield Diagnostics, of Scotland, with Axis Biochemicals, of Norway, both of which have developed a novel test for cardiovascular disease. But examples of such mergers are rare.

Until consolidation begins in earnest, say analysts, the true potential of European biotech is unlikely to be realised fully. Being a national, or even a continental, champion is not enough. Biotechnology companies, and the pharmaceutical companies they serve, are international.

In the end, companies will either make it on the global stage – or they will not make it at all.

EUROPEAN ATTITUDES by Cath Blackledge

Benefits that go against the grain

Public sensitivities, notably in the current debate over genetically modified foods, have been more acute than in the US

A trade war is looming. More than 10m tonnes of US soy beans and maize, about 30 per cent of it genetically modified, will set sail for Europe's shores this summer. But the majority of Europeans say they do not want it.

The US Department of Agriculture estimates it lost \$270m of trade last year as a result of blocked imports of maize alone. How much it could lose this year depends on whether European consumers continue to say "no" to the fruits of biotechnology.

Western Europe arguably gave birth to biotechnology in 1983 with the discovery in Cambridge of the molecular structure of DNA. But Europeans have treated biotechnology as an entrepreneur's dream with far greater suspicion than their US counterparts.

In 1986, public debate over the production by Novo Nordisk of insulin and human growth hormone using genetically engineered enzymes prompted Denmark into drawing up the world's first gene technology law. But the hurried legislation was so stringent that Novo Nordisk threatened to leave the country unless it was relaxed.

Three years later, in Germany, a lack of gene legislation forced Hoechst to abandon its plans for a factory to produce genetically-engineered insulin. The plant was eventually built in 1995.

"Germany would probably be the biggest single biotechnology player in Europe today if it had been able to develop in a normal way," says John Durant, chair of the European Federation of Biotechnology task group on public perceptions of biotechnology.

Prof Durant is also the co-editor of *Biotechnology in the Public Sphere*. In what is the most up-to-date assessment of European attitudes, 18,246 EU citizens were questioned at the end of 1996 – just months before the announcement of the birth of Dolly the cloned sheep, and as concerns about GM food began to surface.

The European Commission report, published in January, argues that – despite the fears over GM food – biotechnology in the broader sense is gaining acceptance. DNA imagery is used to sell cars, high-tech products with health benefits are broadly accepted, and some medical technologies are viewed with less suspicion in Europe than they are in North America.

Europeans are more accepting of genetic testing than their US counterparts, perhaps because of the structure of US health insurance. Last June the Swiss voted in a referendum against a proposed moratorium on biotechnology

research. Voters were swung by a growing awareness of the potential economic and health benefits of biotechnology and a fear that jobs would be lost if biotech companies went abroad.

"The study does dispel the myth that Europeans are fundamentally anti-technology," says Prof Durant. Countries with legislation and

'Companies need to take account of the political geography of biotechnology'

technologies thrust on them, such as Austria, are more suspicious. Austria was forced to accept EU directives on biotechnology when it joined the EU in 1994. Public resentment was exacerbated by an illegal field release of GM potatoes in the spring of 1998.

Today Austria continues to turn away all consignments of GM soy and maize and has yet to see any deliberate GMO releases. More than two-thirds of Austrians, compared with a European average of 67.5 per cent, say they would not

buy GM fruits even if they tasted better.

Ignorance, too, plays its part. According to the report, only one-third of Europeans realise that naturally-grown tomatoes also have genes. Misinformation is compounded by mistrust of scientists following the BSE (mad cow disease) shock of the mid-1990s.

There is also a perception that GM food is being imposed on Europeans by arrogant US companies. "The fact that GM food is a North American product, derived from a North American seed company, which was then shipped as unsegregated material to Europe, had a significant effect on the public debate," says Prof Durant. "Companies need to take account of the political geography of biotechnology. Monsanto has learnt that to its cost."

"Not all companies were sensitive enough, and forgot that sensitivities can be different in different countries," agrees Mads Ovlisen, chief executive of Novo Nordisk. "You can kill off a technology quite easily if you steamroll on," warns Prof Durant.

One way to avoid this suggests Nigel Poole, head of regulatory affairs at Zeneca Plant Science, is to foster more informed discussion. That was done in the UK with in vitro fertilisation (IVF) in the early

1980s. "Society has got to find ways of rebuilding trust in the regulatory system and find ways of handling high-tech issues," he says.

Legislators at national and European level also have a large role to play. The relatively youthful regulatory system in Europe is fragmented, politicised and confused in comparison with America's federal systems. It took 12 years for Europe to reach a consensus on the patenting of biological discoveries.

"I can understand why people are uncertain if they do not know what they are putting into their mouths," says Mr Ovlisen. He believes it could be a long battle to reclaim consumer confidence. "Companies have to be prepared to be patient."

Agricultural and food biotechnology is the focal point for current dissension. But the cloning of humans, the production of spare body parts from stem cells and xenotransplantation (the use of animal organs for human transplantation) are issues waiting in the wings.

"There is a need for industry, scientists and government to be thinking ahead to give adequate time for debate and to get social consensus for these technologies," argues Prof Durant. "If instead they lurch into the marketplace, then they're in for trouble."

GERMANY by David Pilling

Bavarian 'buzz' is spreading

The country has been turned from a virtual biotech backwater to one that boasts at least 300 such companies

Genome Pharmaceuticals (GPC), one of scores of biotechnology companies sprouting up around Munich, is temporarily housed in a grey, unglamorous warehouse on Lochamer Strasse. It shares space with an advertising agency, a lithographer, and a storage unit.

The start-up's housing difficulties reflect the boom in Bavarian biotechnology: just a few hundred yards away the biotech incubator at Martinsried is full to bursting.

Micromet, a research company specialising in cancer, managed to secure offices in the Martinsried incubator. But the company – whose chief scientific officer, Patrick Bäuerle, is one of several prominent German entrepreneurs to be lured back from US exile – is about to outgrow its allotted space.

The buzz in Martinsried, one of Germany's emerging biotech clusters, is mirrored up and down the country. In Cologne, Düsseldorf, Heidel-

berg, Berlin, and Hanover, scientists are setting up companies with an entrepreneurial zeal not often associated with Germany.

"What's happening in German biotech is amazing," says Jörg Pötsch, vice-president at Atugen Biotechnology, a German spin-off from a US biotech company. "The number is really exploding, though I know that does not tell you about the quality. But there's a belief that Germany has shifted its attention from steel and coal to biotech."

That shift has partly been spurred by worsening unemployment, particularly among academics. Germans, for years suspicious of biotechnology, have concluded that job creation will come in the new industries, not the old. The public now accepts biotech, at least when applied to human medicine.

Two events have cemented the trend. The first was the BioRegio competition launched by Jürgen Rüttgers, former sci-

ence minister, in 1995. In an effort to emulate the high-tech clusters that had developed around such cities as Boston, San Francisco, Cambridge, and Oxford, he offered federal funds to three German regions. The winners were Munich, Cologne/Düsseldorf, and the Rhine/Neckar area around Heidelberg. Even the losers, such as Berlin and Hanover, were stung into action.

Second came the establishment in 1997 of the Neuer Markt, a stock exchange for smaller companies, which gave venture capitalists a potential exit route for their investments.

"These two events sent a clear signal that biotech was welcome in Germany," says Simon Moroney, chief executive of Morphosys, which became Germany's first publicly quoted biotech company this month. (Quagen, which is listed, is considered a diagnostics company.)

Several other companies, including Artemis, Evotec, Lion, MediGene, and Sequenom, are mentioned as

among the companies that may also seek listings.

Share ownership has become more fashionable, says Mr Moroney, since the partial privatisation of Deutsche Telekom in 1996. Retail interest has been maintained by the spectacular performance of several high-tech companies.

As a result Germany has been transformed from a virtual biotech backwater five years ago to a country that boasts at least 300 companies. Since 1995 the number of start-ups has roughly doubled each year, and there is little sign of slowdown.

That flurry of corporate creation has been facilitated by an upsurge in venture capitalism. Five years ago only Techno Venture Management (TVM) and Atlas Venture were willing to lend to German biotech.

"It was a desert from a financial point of view," recalls Mr Moroney, who had to go to the UK for start-up capital. "But there was an awful lot of untapped science," he says, particularly

in the world-renowned Max Planck Institute.

Today more than 10 venture companies are endeavouring to turn that science into commercial success. They have been encouraged by generous federal and state grants.

GPC, a functional genomics company, for example, raised DM6.5m in seed financing through BB BioVentures and TVM. That amount was nearly tripled through a BioRegio grant of DM6m and a so-called silent partnership (a mixture of debt and equity) underwritten by a local bank.

Investors regularly triple their original stake this way, and can even get part of their investment insured.

"This creates huge leverage for venture capitalists," says Mirko Scherer, vice-president finance at GPC. "It's amazing."

Too amazing, say critics. Some wonder whether companies are being formed that would never get off the ground in a more market-driven system. They also

question whether Germany has the necessary management experience.

"There's a lot of froth," says one London-based venture capitalist. "We're just waiting for the bubble to burst."

Some Germans share those concerns. "In an environment where there's ample money you can sometimes be led astray," admits Erich Felber, chief executive at Micromet.

But more believe the fears are overdone. As far as management is concerned, biotech has been adept at attracting German entrepreneurs from abroad and from pharmaceutical companies.

Helmut Schüßler, managing partner of TVM, believes Germany has struck a credible balance between kick-starting a biotech industry and allowing market mechanisms to operate.

Rather than trying to pick winners, the government channels funds through professional lenders since official finance is only granted to companies that have raised money in the private markets.

"They used us [venture capitalists] to direct their funding," he says. "That was a very clever thing to do."

FRANCE by David Firm

Initiatives create a new climate

The socialist government is taking steps to loosen ties on state scientists, allowing them to take part in start-up enterprises

There is a widely held view among French scientists, used to jobs for life in government research institutes, that science should stay in its ivory tower, free from the corrupting influences of capitalism.

France has world-class life science research, but cultural and structural barriers discourage scientists from setting up companies. Government investment initiatives have created a new entrepreneurial climate, but venture capitalists are finding it hard to recoup their investments.

Even when scientists catch the capitalist bug they are forbidden from "moonlighting" for start-up companies. Those who quit academia say goodbye to job security and comfortable pensions. Only 40 or so research scientists, from a total of 25,000, make the jump to the private sector each year.

Gerard Soula, chief executive of drug-delivery company Flamel, agrees that France's centralised science policy has suffocated innovation. "Money is not seen as a plus. We see ourselves as more intellectual."

Many of France's biotech companies have been founded by researchers who have spent time in the US. "They come back, and say 'why not me?'" says venture capitalist Laurent Ganem, a partner with Apex.

Encouraged by French biotech pioneers such as Genset and Transgène, a new generation of researchers is rejecting the anti-enterprise mantra.

"What freedom do you have when you must do what the government tells you," asks Thierry Jean, who created drug-discovery company Cerep in 1989 after a three-year stint at the US National Institutes of Health.

Things are changing. Germany's spectacular efforts to promote the biotech sector have shocked France into action. "Five years ago we were almost laughing at Germany. In two years they are

ahead of us as a result of political will," says Pascal Brandys, chief executive of genomics company Genset.

Last year, finance minister Dominique Strauss-Kahn announced a package of measures to kickstart commercial science, including a FF600m state investment in local venture capital funds, and a FF100m seed fund to compensate for a distinct lack of business angels.

Prompted by the need to create jobs, the socialist government has agreed to relax the terms of employment for scientists. A package of legislation to promote biotech, awaiting a vote in the National Assembly, will allow government scientists to participate financially in start-ups, without giving up their jobs.

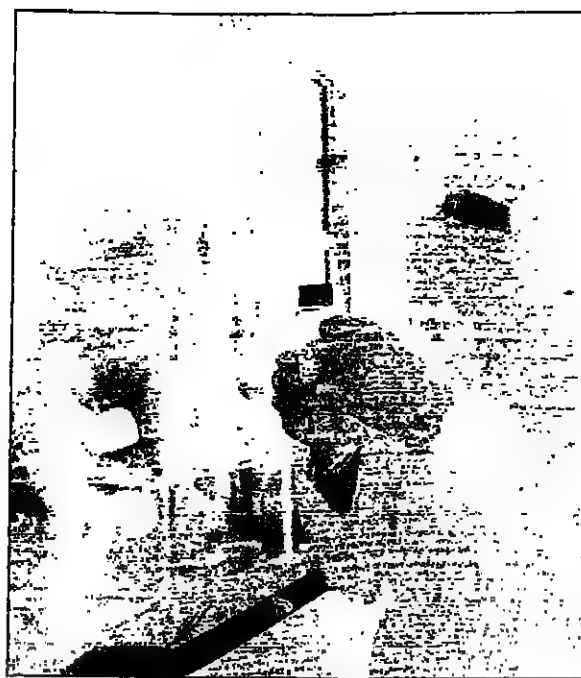
The legislation will also encourage institutes to establish technology transfer units, to circumvent a bureaucratic, centralised commercialisation system that breaks the link between scientists and managers.

To support the spin-outs the ministry of research has created 13 pre-incubator centres, which offer accommodation for two years to start-ups.

There is only one biotech science park in France - the Genopole at Evry south of Paris, which is home to Genset. Four more are planned. Strasbourg and Lille are almost certain to be chosen, and Montpellier is a strong possibility, according to Jean Alexis Grimaud, deputy director at the research ministry.

However, proposals that would have cut the tax on stock options fell victim to anti-fat cat sentiment in the National Assembly. Stock options, which often form the bulk of a senior executive's remuneration in US and UK biotech companies, attract income tax and social security payments in France.

"This is totally inappropriate for an industry that is trying to attract key individuals," says Mr Brandys. Nevertheless, civil servants believe it is only a



In the lab at Transgène, a French trailblazer

matter of time before the entrepreneurs get their way.

Venture capitalists have raised record funds for life sciences in the new climate. In 1998 about FF1.5bn was invested in French biotech by venture funds. Apex is in the process of closing a FF2bn fund. Sofinnova, the oldest of France's venture capital companies has just raised FF790m. Last year Auréa Partners raised FF450m.

"Now if you need a lot of money it's possible in France," says Sofinnova partner Denis Lucquin. Alain Gilbert, the chief executive of Thalix, a company that is raising FF90m to develop drugs from marine algae, says there is more money available today than ever before. "This time we are not looking to the UK for money," he says.

What France, like most continental countries, lacks is executives with a track-record of taking companies from idea to product. "There are lots of people with ideas. Scientists of amazing quality are jumping into the boat. But management skills are another story. We don't have the serial entrepreneurs yet," says Mr Ganem.

Start-ups are going to need all the private funds they can get, because while venture capitalists are flush with money, the scene at the stock exchange could not be more different. The Nouveau Marché, launched in 1998 as a source of public money for high-growth companies, has run dry. Cerep, which tapped the Marché to grow from a small fee-for-service operation into a transatlantic player with its own drug development programme is now trading at an historic low along with

translating into superior returns in home markets, it also allows the company gradually to increase its capabilities in drug development, manufacturing and marketing without increasing risks or overheads.

Jorgen Buus Lassen, president and chief executive, said that eight pharmaceutical companies expressed an (unsolicited) interest in its anti-depressant NS2389 while it was in Phase I safety trials in the UK. At the beginning of February, NeuroSearch received permission to move into a Phase II efficacy trial. "Once the trial is running we will send out information to the companies that approached us and before the next study take on a partner," Mr Buus Lassen says. Studies show that NS2389 is faster acting than existing anti-depressants, showing an effect after one week against four to six weeks for Prozac and Paxil. This would significantly reduce the risk of suicide in patients requiring treatment for depression.

While collaborative deals to date have achieved royalty rates in single figures, Mr Buus Lassen says he hopes to secure more than 10 per cent for NS2389.

NeuroSearch was also approached by the US National Institute on Drug Abuse (NIDA) proposing a joint development project for NS2389, which NIDA had singled out as a potential treatment for cocaine addiction.

The next milestone in the development of NeuroSearch should be its lead compound brasofensin, for the treatment of Parkinson's disease, moving into Phase III clinical trials. NeuroSearch had previously said it expected Phase III to begin in 1999 but Mr Buus Lassen says the Phase II trials are currently being analysed.

Several collaborations are in place. NeuroSearch signed its first licensing agreement, with Warner Lambert, in 1990. Since then it has struck partnerships with Pfizer, Bristol-Myers Squibb, Shire Pharmaceuticals, Pharmacia & Upjohn, and Meiji Seika Kaisha of Japan. An agreement with Glaxo Wellcome, in which the two were developing treatments for asthma and stroke, was ended in September 1997 at the pre-clinical stage.

NeuroSearch is careful to exclude rights to the Scandinavian and Baltic markets from its licensing deals. While this should

Nuala Moran

FINANCE by Nuala Moran

A year best forgotten

Stock markets have been buoyant, but small-cap biotech companies have felt a cool wind in their search for funding

Last year was a horrible one for the biotechnology industry, both in the US and Europe. Against rising markets, the value of quoted companies fell sharply and many institutional investors pulled out. The change in sentiment hit the financing of European companies at all stages of development.

"Fund managers who had an interest in the sector clearly had cause to regret it in the past 12 months, particularly when indices in general were on the way up," says Jeremy Curnock Cook, director of the bioscience unit of Rothschild Asset Management.

"Fund managers who were in biotech for the short term departed some time ago: those in for the longer term were not comfortable but took the view the market is cyclical, so staying in is the best strategy."

Three companies - Oxford GlycoSciences, Oxford Asymmetry, and Quadrant Healthcare - floated in London in the early part of 1998. Since then there have been no IPOs in London, though Bioscience Innovation and Regen Therapeutics did slip on to Olex, the unregulated London market.

There was limited activity elsewhere in Europe. Pharma-

on Nasdaq and Easdaq.

Malcolm Morville, chief executive, says: "Nasdaq has been a difficult market for small cap stocks, both biotech and non-biotech, with no IPOs in the past six to nine months. We have two wholly-owned subsidiaries in Denmark and many Scandinavian investors, so it makes sense to list in Copenhagen."

The German company Morphosys floated on the Neuer Markt in Frankfurt this month, but the picture in 1999 remains mixed, with Biovector Therapeutics pulling out of its flotation on the Nouveau Marché in Paris, planned for February 22.

The end of last year saw some heavily-discounted rights issues by companies listed in London. It says much about the state of the sector that PPL Therapeutics, the company associated with the most famous development in the history of biotechnology, the cloning of Dolly the sheep, was forced to offer a discount of more than 30 per cent to raise £20m last November. In the same month Therapeutic Antibodies raised £7.5m at a 52 per cent discount.

The run of bad news in the quoted sector is having an effect on the unquoted companies. Chief executives of start-up and early-stage companies all make the same comment - there is money available if you have a good story to tell. Investors are

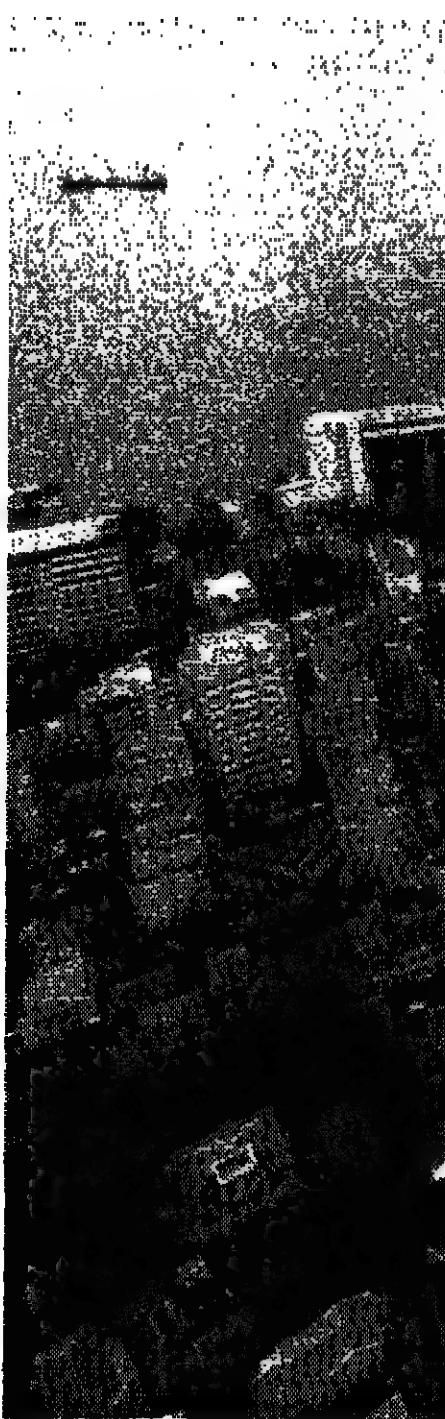
looking for a more robust business model than the one that promised jam tomorrow when the blockbuster drug was registered. They are interested in companies with platform technologies that can be licensed or used to attract partners, collaborative deals that provide staged payments and the promise of a royalty stream, and the spice of an in-house portfolio with blue sky value.

The sad state of the quoted companies and paucity of IPOs is not damping the enthusiasm for starting up companies. But it is making venture capitalists more selective, according to Anthony Ross of 3i, the leading venture capital investor in biotechnology. "It is forcing investors to be more selective on start-ups and the exit valuation is likely to be less."

Chris Coghill, head of Generics Asset Management, agrees. "The number of early-stage opportunities is increasing but the value is going down and there are worries for early-stage investors that the time to realisation is getting longer."

Despite this, Atlas Venture announced at the end of February that it was launching a new \$100m fund. "The effect of the adjustments we saw in 1998 is to make biotechnology less valuable but more reliable, adds Mr Ross."

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PROFILE
NEUROSEARCH

Through window of opportunity

Punitive taxes on venture capital have discouraged the formation of biotechnology companies in Scandinavia, but one that got under the wire is NeuroSearch, a specialist in central nervous system diseases. Its portfolio reads like a cure for every modern ill, with potential treatments for anxiety, depression, drug addiction, stroke, Alzheimer's, and Parkinson's disease. "We were very lucky to beat the system," says Asger Aarund, chairman and co-founder of the company, which is based in Glostrup, Denmark. "Ten years ago when we founded NeuroSearch, the Danish banks, inspired by what was happening on the US scene, went into venture capital. Unfortunately they fell flat on their faces and it was a disaster, but we took advantage of this window of opportunity."

The company was established in May 1989 with DKr29.7m in funding. It subsequently raised DKr28m in a series of private funding rounds before going public on the Copenhagen exchange in 1996, raising DKr238m. In April 1998 a rights issue raised a further DKr259m, giving NeuroSearch a current total of \$50m in cash and the luxury of knowing it is sitting on enough money to see it through to profitability.

Strategically, NeuroSearch has taken a middle road to balancing risks and returns. It has a policy of developing compounds alone until mid-way through the second stage of clinical trials.

While this increases costs, if the data is good enough partners will then be prepared to pay more in upfront payments, milestones, and royalties. It also gives NeuroSearch control over the pace and direction of the development programme.

Similarly, the company has kept overheads down by outsourcing clinical trials but retained control by having an in-house team to manage them. Nevertheless, overheads have risen sharply in the past three years as more projects moved into clinical trials.

As is typical for biotechnology companies, revenue, which comes mostly from payments from collaborators, is very lumpy. Income in the first six months of 1998 was DKr49.4m, but the company did not expect to receive much more in the second half.

Several collaborations are in place. NeuroSearch signed its first licensing agreement, with Warner Lambert, in 1990. Since then it has struck partnerships with Pfizer, Bristol-Myers Squibb, Shire Pharmaceuticals, Pharmacia & Upjohn, and Meiji Seika Kaisha of Japan. An agreement with Glaxo Wellcome, in which the two were developing treatments for asthma and stroke, was ended in September 1997 at the pre-clinical stage.

NeuroSearch is careful to exclude rights to the Scandinavian and Baltic markets from its licensing deals. While this should

THE UK by Virginia Marsh

Still ahead of the game

There has been evaporation of investor confidence, but the sector continues to expand at a blistering pace

From the sorry state of the quoted UK biotechnology sector, where company valuations nose-dived last year after the British Biotech affair - in which managers were accused of exaggerating the efficacy of the company's lead product - it would be easy to assume the industry was in trouble.

In fact, the sector - the second-largest in the world after the US - is still expanding at a blistering pace. A report published this month by the BioIndustry Association says there are more than 400 companies in the sector - only about 40 are stock market listed - and the industry employs an estimated 35,000 to 40,000, a number that has been increasing at 20 per cent a year over the past four years.

"The UK sector continues to grow exponentially - unlike in the US," says John Sime, BIA chief executive. "We're still seeing something like one new company being formed a week."

Rob Zegelaar of Atlas Venture, the Dutch venture capital group, says the UK industry has a critical mass and infrastructure that continental Europe still lacks.

"It's both easier to make and manage biotech investments in the UK," he says. "There is excellent science, and you have serial entre-

preneurs here. There are also lawyers, accountants and City [of London] analysts who know the sector. This makes a big difference."

The industry remains concentrated in what Schroder Ventures, an active investor in the sector, describes as the "golden triangle" of Oxford, Cambridge, and London, as well as in central Scotland. But other regional clusters of activity are emerging around university cities such as Manchester and York, and in the south-west around Bristol, Bath, and Cardiff.

Ron James, chief executive of PPL Therapeutics, the Edinburgh-based company famous for cloning Dolly the sheep, says universities are increasingly aware of the commercial potential of their research but that there is still some way to go.

"They often have an inflated view of the value of their early stage science," he says. "Turning science into a commercial product can cost tens of millions of pounds."

Despite the enthusiasm at the grass roots, the evaporation in investor confidence in the quoted sector has created something of a watershed for the industry.

One of the most tangible results of the problems has been a far harder environment for raising cash.

Even companies that have

delivered what they promised have been hit. PPL, for example, was only able to raise cash last summer by offering a 33 per cent discount. The £20m offering was priced at 80p compared with 450p at flotation in 1996 even though the technology behind Dolly is three years closer to delivering a commercial product.

Dr James, who sits on the boards of two smaller biotechnology companies, says the non-quoted sector is also facing financial constraints. There are relatively few dedicated biotech funds, and investors have been switching investments into other areas of technology such as media and IT, sectors that offer quicker returns.

Among other things, the biotech industry has not lived up to earlier hopes that it would be able to develop drugs significantly more quickly than the big pharmaceutical companies.

"These days, to attract funding, companies need to be further into trials and have more substantial, wider and bigger portfolios," says Cathrin Petty of Schroder Ventures, predicting this will lead to more consolidation.

Ms Petty says investors are also placing more emphasis on the strength of the management team.

"It's a question of man-

agement," she says. "As more companies get products to market, there will be more managers who understand the process because they have been through it before. The UK sector has benefited from ex-pats returning from the US biotech sector, but there aren't enough. Former big pharma employees are also coming into the sector but they don't always adapt well to working at smaller biotech companies."

Consolidation, meanwhile, is already under way. Shield Diagnostics, for example, is merging with Axis Biochemicals of Norway. Together, the two former competitors will have a strong global position in homocysteine, a new test for heart disease.

Consolidation is also taking place among the big pharmaceutical companies. This is stopping them in the short-term from licensing from biotech companies as aggressively as they used to, says Mr Zegelaar.

A longer-term danger is that the bigger companies emerging will only be interested in drugs with potentially large markets capable of making material contributions to their enlarged businesses.

"The question then is who will license biotech companies for the drugs with smaller markets," says Dr Sime. "We also don't know if

the merged companies will spend as much on research and development."

With healthcare budgets around the world under pressure, there is also the issue of payment at the customer end. Aided by powerful new tools such as genomics, companies are working on a greater number of potential treatments than ever before.

"It's not yet a pressing issue," says Dr Sime. "But from 2000 onwards there will be 20 to 40 new drug candidates from UK biotech companies in the system each year. Going forward it is not clear whether the amount will increase, flatten out, or even fall. It depends on who is going to pay for all these treatments."

At the same time, like others, he believes the product launches will change the industry's image. "The sector will go from being one based on hope to one that has had tangible success."

After all, it was only recently that Chiroscience, with its Chirocine anaesthetic, became the first UK biotechnology company to take a treatment from discovery to regulatory approval.

Dr Sime says the sector is already benefiting from a far more positive attitude from government since Labour took office in 1997.

Poste Script

A regular column written by George Poste, chief science and technology officer at SmithKline Beecham

Antibiotic Armageddon

Nature's own processes of genetic modification drive the deadly emergence of antibiotic-resistant bacteria

Antibiotics rank among the most important medical advances of the 20th century. Each year they save countless lives and spare millions from disabling infections. But the protection provided by these drugs is under siege.

Bacterial resistance to antibiotics is increasing rapidly, threatening to recreate the pre-antibiotic era when infections killed and maimed routinely. Bacterial resistance to penicillin was predicted, and found, within two years of launching this pioneer antibiotic in the 1940s.

Today's threat resides in the dramatic amplification of the problem. Resistance is now found in many different kinds of dangerous bacteria, and the emergence of "superbugs" that resist killing by all antibiotics poses a formidable risk.

The culprit in this story is genetic modification. This is not the same genetic modification that has recently been capturing headlines about genetically-modified food. Instead, it involves the natural process of relentless, ubiquitous, genetic change that drives evolution and biodiversity.

Bacteria are the oldest, and most abundant, life form on Earth. They exist in every geographic niche and display a remarkable ability to adapt to each new environment shaped by human activities. For every human generation, more than 100,000 bacterial generations will occur in the same period.

Such an expanded pedigree allows endless patterns of genetic variation to be generated. Much of this variation will be of little consequence, but some changes will render bacteria able to resist chemical assault, whether from man-made antibiotics or from within their natural environment.

Today's antibiotics are modelled after natural chemicals produced by bacteria and fungi. In nature, these molecules are used as chemical weapons by micro-organisms to protect their territory against invasion by other bacterial interlopers and invaders.

These "bug wars" have likely existed for millions of years, allowing bacteria to hone their genetic machinery for rapid change in order to adapt and to survive ever-changing chemical assaults.

In the 50 years since penicillin became available, bacteria have relentlessly modified their genetic make-up to create descendants with increased resistance to particular antibiotics. In turn, the need to use even more powerful antibiotics to overcome these forms of bacterial resistance fuels a vicious cycle of genetic selection in which the descendants of these already resistant ancestors now acquire resistance to additional antibiotics.

In addition to passing resistance to their progeny, some bacteria transfer resistance genes to completely unrelated bacteria. Bacteria use highly-ingenuous ways to defeat antibiotics, including:

- blocking the ability of antibiotics to get into the bug;
- pumping out any drug that enters so fast it has no

'Society is ill-prepared for this window of vulnerability'

time to work:

- by breaking down the antibiotic before it can act;
- and by myriad genetic changes that eliminate the targets against which the antibiotic acts.

Reassertion of human inventiveness to find new drugs that kill bacteria in entirely different ways to current antibiotics is now an urgent public health priority. This quest is facilitated by new genetic technologies that enable the bacterial genes involved in causing disease to be deciphered and to select antibiotics that block their action.

Yet even with optimum progress, it will take seven to 10 years and an R&D investment of £150m to £200m to bring a single new antibiotic to market. Infections caused by resistant bacteria will continue to escalate during this hiatus before any new antibiotics become available. Society is ill-prepared, medically and emotionally, for this window of vulnerability in the early millennium.



The initial success of antibiotics created a false comfort that the conquest of bacterial infections was at hand. This premature conclusion generated a dangerous complacency that has allowed antibiotic resistance to escalate alarmingly, driven by a variety of factors, including:

- inappropriate and excessive use of antibiotics by doctors;
- the feeding of antibiotics to livestock to promote growth;
- the relaxation of infection control standards in hospitals;
- reduced government expenditure on the surveillance and monitoring of infections;
- and a retreat by the pharmaceutical industry from antibiotic research to shift its R&D focus to other diseases.

As emphasised last year in the impressive report on antibiotic resistance from the House of Lords (the UK parliament's unelected upper house), urgent actions are needed to redress these shortcomings, to restore discipline to antibiotic prescribing, to improve the detection and tracking of resistant infections, to mandate the treatment of carriers, and to place greater emphasis on infectious diseases in medical training and careers.

The accelerating pace of resistant infections portends the end of the inaugural era of antibiotic therapy. As research seeks to restore our dominance over bacteria by discovering the next generation of antibiotics, we must recognise the inevitability of further genetic modification by bacteria that will predictably thwart this next generation of drugs.

Every future antibiotic will follow the same cycle of success and failure that has overtaken the first wave of pioneering antibiotics. For each new antibiotic discovered in the years ahead we must immediately begin the search for its successor.

By acknowledging the remarkable genetic plasticity of bacteria as a crucial element in strategies to control infectious diseases, we will go a long way towards ensuring that society never again be exposed to our current vulnerability.

Consolidation

Continued from Page 1

output with only one-third of its R&D resources.

"US companies have offered a different model... almost an anti-merger strategy," says Donald Meltzer, head of global healthcare at Credit Suisse First Boston. On several occasions Merck, the most consistently successful company over the past two decades, has lost its number one slot to newly-merged companies, only to re-establish its lead through organic growth. In the words of one executive, "bigger companies simply have a

bigger beast to feed".

Research by several consultants supports that view. While mergers bring short-term cost-savings, there is scant evidence they increase productivity or market share in the longer term. The assets of a drug company are its employees; jamming two cultures together can be enormously distracting and demotivating.

The potential pitfalls of mergers are well known. But few in the industry doubt that consolidation will continue, particularly in Europe where many smaller companies do not appear to have a

strong independent future. And it would only take a downturn in the US market, which has buoyed up America's drug groups, to bring the prospect of consolidation across the Atlantic.

One thing is clear. What would really animate the industry is a deal between two strong companies - a merger undertaken not primarily for defensive reasons but rather to gain a strategic jump on the opposition. If a deal of that nature were pulled off, the recent round of consolidation would come to seem like merely a warm-up act for the main event.

FINANCIAL TIMES SURVEYS

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SURVEYS PROGRAMME AND INDEX

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In Perfect Balance

According to the ancient Chinese philosophy of yin and yang, the universe is composed of opposing but interdependent forces. ■ Interestingly, this philosophy resembles the concept of homeostasis, the natural balance that occurs within living organisms, including the harmony between antagonists and agonists that regulate vital functions. Thus, an important factor in the search for new medicines is developing compounds that work together with the body's own restorative and regenerative abilities.

■ To lead healthy lives, we must seek balance with nature, with society, and within ourselves. As a leading pharmaceutical company, Takeda is striving to help people attain this balance.

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Monday March 15 1989

Mastering

INFORMATION MANAGEMENT

Part Seven
Electronic
commerce

FINANCIAL TIMES



Next week

The human factor

COMPUWARE
What do you need most?

ERNST & YOUNG

John 1:150

Welcome to Mastering Information Management

Part 7 of 12

This is the seventh part of our weekly series aimed at helping IT readers master the management of information and the technology that captures, stores, distributes and processes it inside and outside their organisations.

So far we have looked at the changing information and competitive environment, the use of IT inside the business and along the supply chain, the impact of IT on organisational structures, and knowledge management for full contents see the latest syllabus on page 103.

This week we tackle another much-discussed topic – the way in which commerce is moving rapidly to a digital platform. As all the articles here make clear, e-commerce raises issues that pervade all functions and departments within a company, but the start with the focus firmly on marketing and the customer.

On this page Shikha Jarrappa and Stefano Grasselli imply that e-commerce will come to nothing if Internet retailers are unable to gain customers' confidence. Such trust is always fragile but there are particular concerns to be addressed in e-commerce. John Vlach (page 4) pursues the theme of customer satisfaction on the Internet with his discussion of "e-commerce debt". Those companies that have made minimal investments in their websites should heed the conclusion that in a few years unimproved communications and offerings will look as outdated as Henry Ford's "any colour you like as long as it's black". On pages 6-7 Nirmalya Kumar addresses the worry shared by many established companies that the Internet has the potential to disrupt as well as transform distribution channels.

For a more macro-economic perspective turn to the article on pages 8-10 by Andrew Whitson, Manoj Parameswaran and Jan Bullmer. These three authors analyse the way digital networks are making possible the economic dream of "markets for everything", and look at how some companies are taking advantage. The same strategic flavour characterises the last two articles this week. Robert Plant and Leslie Whitlocks (pages 10-12) describe how companies are developing coherent and effective e-commerce strategies, while William Kotlinger and Gary Hasketh (pages 12-14) offer advice on how to gain competitive advantage from closer ties with suppliers and competitors.

There is no correspondence due to space restrictions this week – but a bottle of pink champagne is on offer for the best letter published in subsequent parts of the series. In Part 12 you will be invited to test your knowledge and skill with a competition. Have you Mastered Information Management? Please note that our website, www.mastering.com contains summaries of each week's material, plus additional background reading.

● You can e-mail us at editor@imim.com or write to FT Mastering, 2nd floor, Number One Southwark Bridge, London SE1 8NL.
● For back issues, please e-mail backissues@imim.com or telephone +44 (0) 181 763 8383.



Stefano Grasselli is professor of information management systems at the University of Texas at Austin. His current research focuses on global IT, e-commerce, and the use of IT in organisations.



Shikha Jarrappa is professor of information management systems at the University of Texas at Austin. Her current research focuses on global IT, e-commerce, and the use of IT in organisations.

In 1994 commercial shows a couple of American tourists visiting a small-town park. They are in rural Italy. When they introduce themselves as coming from Illinois, the elderly shopkeeper replies: "Ah, Illinois? No, I live in Florida, California, New York, Arizona, Colorado, Alaska...". The comment makes the like of modern globalisation and suggests that the message is clear: an Internet presence allows nearly any location to reach potentially millions of customers.

Online retailers have prices and the creation of entirely new product categories are among the other advantages cited by enthusiasts for the form of commerce. Yet, unless such electronic shops provide can convince consumers that the seller has the ability and motivation to deliver goods and services of the quality they expect, Internet shopping will not reach its full potential. Indeed it risks becoming discredited.

The US Department of Commerce already reports widespread distrust among consumers about Internet-based merchants. This (as we shall see) is partly due to the special characteristics of the medium compared to traditional retail formats. Lower entry and exit costs have encouraged many "fly-by-night" operators who have established sites and marketed their wares fraudulently to an unwary public.

Trust

Because of the nature of the medium, Internet merchants have a much harder time when it comes to fostering consumer trust than their brick-and-mortar counterparts. In just culture, consumers grant their trust to business parties that have a close physical presence, buildings, facilities and people to talk to. On the Internet, these familiar elements are simply not there.

Decades of academic research have shown that trust is most readily established when both parties share similar backgrounds, are governed by the same social and legal systems, and expect to interact with each other in future. The seller's reputation, the size of his business, and the level of collaboration in product and services also engender trust.

Take customisation, for instance. Customisation implies willingness on the part of the merchant to commit resources, effort, and attention to a specific customer relationship. As a precondition, the customer requires some prior knowledge of the merchant, enough to feel that the merchant is trustworthy. In the case of a fly-by-night operator, the customer has no way of knowing whether the merchant is trustworthy or not. As we consider the other factors that foster consumer trust, we find that they do not get any easier for the Internet merchant. Store size and reputation can be hard to convey on the Internet and are relatively easy to forge. The information on many websites about their legal (and physical) location, consumer legal protection and remedies is often incomplete or ambiguous.

Risk

From the consumer's standpoint, trust is the antidote to perceived risk. In a business transaction, Internet consumers will inevitably wonder whether a merchant will deliver the goods that they have paid for. If goods are delivered, will they be the ones that they have ordered? Can they be returned? To whom? At what cost? The perceived risk depends on the likelihood of default by the other party and on the extent of the loss deriving from that default.

Internet merchants need to elicit consumer trust when the level of perceived risk involved in a transaction is high. This is not always so. In the case of the purchase of books over the Internet, for instance, consumers are likely to perceive relatively little risk, when the transaction is unlikely to involve more than a few tens of pounds. Air travel, by contrast, can cost hundreds of pounds and can have a large number of variables which are not easily controlled. The more significant the perceived risk, the more consumers will demand the protection of things as strong as the Internet merchant's bank to develop trust.

Security and privacy

Although it is often said that security and privacy considerations can hamper Internet commerce, recent research has found that consumers will have built up trust in an Internet merchant will know such concerns. Studies of Internet consumer behaviour show that consumers who go online, find something interesting and competitively priced to buy, and perceive the seller as trustworthy, will buy.

Nevertheless, Internet merchants need to address issues such as fear of privacy invasion and alienation of customer information (about their credit cards, for example) because they stop people even considering the Internet as a shopping medium. Earlier this year, one of the present authors received an e-mail from a student residing in Brazil, but enrolled in her University of Texas course. The student wrote: "I ordered the textbook over the Internet, and I discovered last week that my order submission was likely safe-tracked. [A well-known Internet bookstore] did not have any record of my order, and within a few days, someone had purchased a stereo system in the United Arab Emirates using my Visa card."

Technological progress, legal remedies, and user education are helping address these issues. Communications between customers and their Internet and web servers (the information made available by encrypted, so that no unauthorised person can easily intercept. Brokers are becoming more keen to viruses and other kinds of electronic attack. Technologies such as firewalls and digital certificates help control and audit access to Internet about customers contained in a web browser have become more robust.

Misrepresentation and fraud

While tampering and eavesdropping are being tackled, the problem remains that it will always be possible to have a perfectly secure transaction with a merchant, but a very poor customer once part of it. On the Internet, the merchant's reputation is a key factor. The more often the merchant is seen to deliver, the more trust is built up. The more often the merchant is seen to deliver, the more trust is built up. The more often the merchant is seen to deliver, the more trust is built up.

Among the old scams, the pyramid scheme is one of the better known. Pyramid schemes are based on the idea of generating an ever-expanding base of recruits, who are in turn requested to find new recruits. Since the expansion cannot continue forever, pyramid schemes eventually collapse, causing most of those involved to lose money. The enormous potential for such fraud, offered by the

GLOSSARY

application: a piece of software designed to meet a specific purpose.

bandwidth: A network's capacity to carry data. Internet Explorer that enables users to explore the worldwide web.

bug: An error in a computer program that prevents it from working properly.

business process re-engineering: An approach to corporate change which emerged in the 1980s. It involves analysing computer core processes and reassembling them in a more efficient way, without functional divides.

chief information officer (CIO): The senior executive in a company responsible for information management and for delivering IT services.

client/server architecture: A network in which computer processing is distributed among many individual PCs (clients) and a more powerful, central computer (server). Clients can store files and retrieve data stored on the server.

collaborative software: Groupware, such as Lotus Notes or Microsoft Exchange, computer-aided design (CAD), refers to any computer-enabled method of design, also called computer-assisted design.

database: A software package for storing data. **data-mining:** The process of discovering previously unknown information from the data in data warehouses.

data warehouse: A place – virtual or physical – in which business information is gathered electronically, including over the Internet, enterprise resource planning. An integrated system of operation applications combining logistics, production, distribution, contract and order management, sales forecasting, and financial and HR management.

electronic data interchange (EDI): Transmission of documents via any electronic medium using a set of standard forms, messages and data elements.

e-mail: A system that enables computer users to send messages to one another's machines. Ideally, it should allow them to attach files and files other users' mail addresses.

extranet: An extended Internet, based on Internet-standard protocols, which allows access via the Internet by people outside the enterprise.

groupware: Software that facilitates communication, co-ordination and collaboration among people.

hardware: The magnetic, mechanical and electrical components of a computer and its peripheral devices.

hypercompetition: Aggressive form of competition in which companies constantly try to redefine the competences needed for success in a particular market.

Internet: The global computer network, intranet. A private network within an organisation, often protected from Internet traffic by a "firewall" (software that controls access from the outside).

information systems (IS) strategy: The identification and prioritisation of systems of applications for development.

information technology (IT): The hardware and software that is used to process information.

IT productivity paradox: A term used to describe the apparent gap between what companies spend on technology and the increase – if any – in their business performance.

knowledge management (KM): A term with many meanings. It includes deliberate efforts to maximise an organisation's performance through creating, sharing and leveraging knowledge and experience from internal and external sources. See KM 2 and 6.

legacy system: An old database or other application, probably superseded but still in use.

local area network (LAN): A network of computers in a relatively small geographical area.

Lotus Notes: A proprietary software that allows users to share many different types of unstructured and semi-structured information. Lotus is owned by IBM.

mainframe: The central processing unit of a large computer, usually receiving input from a number of terminals.

metaphor: The "metaphor" in e-commerce, microprocessors. Complex electronic circuits that comprise a computer's central information processing unit.

multicomputer (or "departmental computer"): A type of computer that appeared in the early 1970s; a stage in the evolution from mainframes to PCs.

multimedia: A combination of sound, graphics, animation and video used to display information on a computer.

online: Having a computer and modem, or accessible by someone with such tools, operating systems. A program that manages the internal operations of the computer, allocating memory to work files, for instance, parallel with them used to describe a complete re-linking of the business or economic outlook, caused by a startling intellectual or technological discontinuity.

PC: A once meant "you, IBM, not Mainframe" – now it refers to any personal computer. **platform:** The sum of a computer's operating system, hardware architecture and software. It defines the applications that can be run.

protocol: A set of definitions and instructions that enable a computer to perform a particular task.

protocol: The language that one computer uses to talk to another.

software: The programs that are run on a computer system.

value chain: Concept widely associated with the management thinker Michael Porter which focuses on a company's internal processes and the interactions between different elements of the organisation. Analysis of it shows how and where value is added.

value: A type of unclassified computer code within a host program. It can be transmitted to other computers via disks and networks. There are many types of value, some harmful, some not.

wide area network (WAN): A network of computers over a wide geographical area. **workforce web:** an application which runs on the Internet. It provides a standard way of publishing and accessing information.

Your guide to Mastering Information Management

12-part series

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Week eleven April 12
Survivor/profitometer perspectives
● Cause of the information Age
● The CEO perspective

Week twelve April 19
Conclusion
● Summary
● Index

Week thirteen April 26
Conclusion
● Summary
● Index

John Miles

Continued from page 12

Improvements in current operating models. Using technologies such as EDI and EFT (electronic funds transfer) these companies create cross-functional links with customers and suppliers. Large retailers such as Tesco and Wal-Mart have created substantial competitive advantage in logistics and purchasing through their proprietary networks.

What is the common denominator in these successful Level II companies? A business process view tied to the bottom line and a culture that continually uses technological advances to hone process efficiency.

To move from Level I to Level II, companies must make a deliberate effort to align their business strategy with the e-commerce initiatives deployed throughout the organisation. The vehicle for this integration is business process. It has been our experience that a thorough review of the "customer-supplier life cycle" (CSLC) pinpoints those areas that are poorly integrated (see Figure 2).

The CSLC characterises the buying and selling of products and services within a company as an integrated process. We take this process view of e-commerce because buying and selling include a number of activities that must be effectively managed to maintain strong customer-supplier relationships.

Companies must continually focus on (1) the nature of products and services bought and sold; (2) the type of value exchanged by buyers, sellers and other members of the value chain; and (3) the very definition of a buyer or a seller.

The CSLC defines a company's buying and selling activities in a single transaction. It evaluates the extent to which people, information, processes and technology are integrated. It looks at the relationships between customer and supplier as well as between each other. The CSLC is a business process analysis tool that recognises the importance of using e-commerce technology to find and satisfy customer needs as well as after a sale.

Clearly, an integrated CSLC demands increased collaboration and knowledge-sharing between customers and suppliers, as well as standardised policies. The result is an integrated process that shortens transaction times, lowers the cost of expertise, builds trust, and increases customer satisfaction with products and services.

Leapfrogging from Level I to Level II is only possible for a few start-up companies that are not burdened by an existing business model. Companies such as Amazon.com can quickly move from being a bookstore to a drugstore to an internet entertainment portal. However, most companies are not internet start-ups. They have existing business processes, pre-internet business strategies and people that are not always quick to make the transition to the Information Age.

Some excellent Level II companies may make the transition to Level III by the sheer weight of market dominance and a programme of incremental process improvement. Federal Express initially designed its VirtualOrder software to support its existing business processes, including order placement, billing, invoicing and inventory management. A retailer at customer relationship management went on to enhance customer relationships through its InternetShip software, which allows companies to initiate and track shipping transactions online. It also recognised a valuable business opportunity in helping affiliated companies publish and maintain their catalogues online. FedEx has

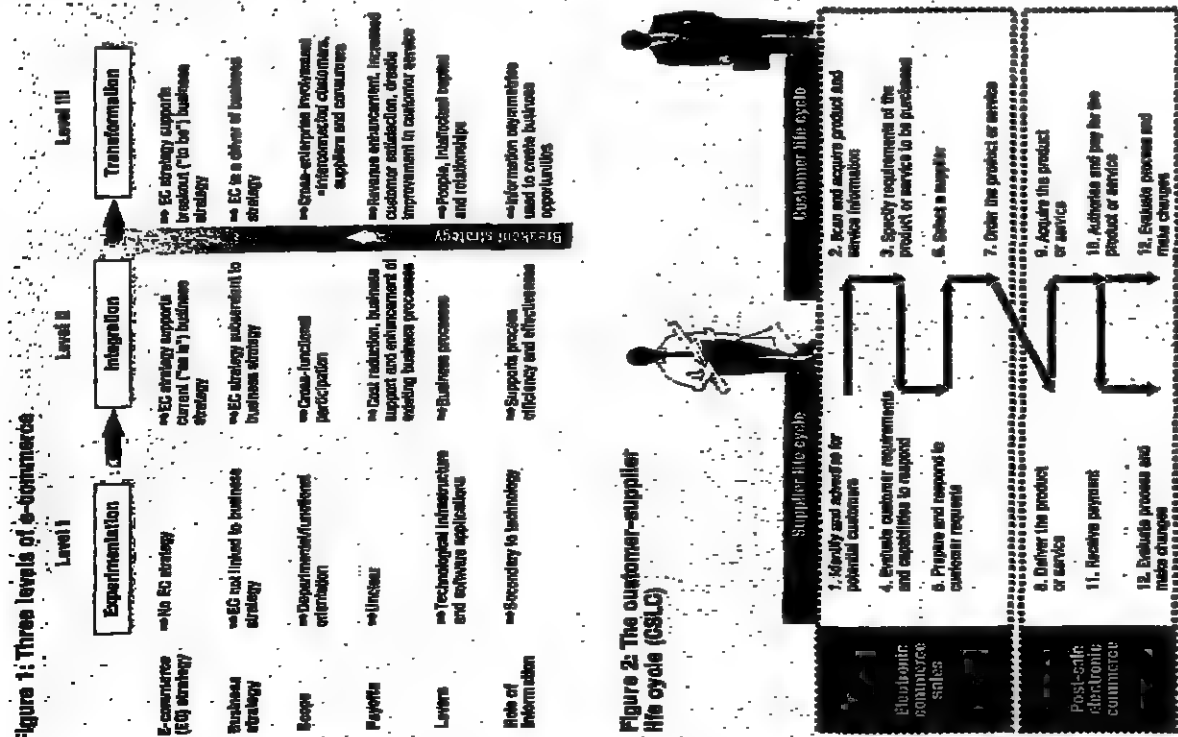


Figure 2: The customer-supplier life cycle (CSLC)

further extended its services by providing facilities to handle payments.

In essence, FedEx is evolving from its business process efficiency perspective (Level II) towards a new internet logistics and transaction management portal for its customers (Level III). It leverages its strong brand and logistics capabilities to achieve new levels of information asymmetries by closely linking its core competencies in virtual and physical value chain activities.

Strategic breakout

While some market leaders such as FedEx may incrementally evolve to Level III, most companies will not get there without major intervention on the part of senior management. If they are to achieve dramatic increases in revenue and customer satisfaction, companies must capitalise on the intellectual capital in their employees and external relationships. Level III business leaders will need to disrupt the status quo by proposing Level III "breakout strategies". However, breakout is only possible if information asymmetries can be exploited and the company has the will, knowledge, talent and technological infrastructure to change course.

How can senior executives position themselves to take the leap? By recognising that e-commerce has changed the rules. Effective leadership demands that senior executives have a greater technological knowledge than in the past. Most importantly, they must develop an "information orientation", in essence, this involves linking the company's strategic information holdings, so that these can be leveraged to improve business relationships.

Where in Level II it was appropriate merely to align IT strategy with business goals, Level III requires executives to align business strategy with the dramatic developments now taking place in information and technology. Executives need a new mindset; they must realise that e-commerce strategy is business strategy.

Breakout strategies begin with executive commitment to an e-commerce vision. This vision is

rooted in the belief that the company is not doing all it can to leverage customer information to build market share and increase profits. An executive taskforce should systematically gather information about customers, suppliers, business partners and e-commerce technologies as they relate to the CSLC. This industry assessment can be systematically compared to the company's current business strategy.

Using a variety of brainstorming techniques to break away from stereotypical thinking, a breakout strategy is then envisioned. The aim is to alter the course of the company by leveraging asymmetrical information so that it will emerge as a leader in specific products or services.

Breakout strategies use industry best practices (in terms of processes and technology) to establish an ambitious, but theoretically obtainable, strategic target. To cope with the turbulence of the information economy, this strategic reinvention must be done habitually to maintain the company's forward course.

Around the world, senior executives have begun to focus on Level III transformation of their companies and industries. Ford's experience is typical. In 1995 it launched an electronic brochure (website) as an advertising medium and source of intelligence (Level I). Its success encouraged Ford to integrate its business activities further via internet/intranet applications that connected employees and suppliers by extending existing EDI. However, major competitors quickly followed this strategy and Ford's advantage was not sustained.

Ford, General Motors, Chrysler and Toyota broke out towards Level III when they created the Automotive Network Exchange (ANX). ANX connected automotive suppliers through a common communication infrastructure of interactive tools.

Business strategies were transformed by co-ops. ANX's members recognised that they could leverage the connectivity of this and other co-ops to create a competitive advantage. Building web of alliances that extended the reach and scope of the automotive community. Competition also had the effect of deepening the commitment and loyalty of automotive community members to each other.

Finding the level

For many companies an immediate jump to Level III may prove difficult. For some, a radical breakout strategy is too much, too fast. In terms of change, clearly, a company must first decide if it is at Level I, II or III. To help with this decision, it should ask the following questions:

Does the company have the technological infrastructure to support e-commerce? Do its e-commerce applications reside within specific departments or functional units? Is it experimenting with new levels of information asymmetries by closely linking its core competencies in virtual and physical value chain activities? Does the company have an e-commerce strategy and does it support the business strategy? Does it integrate e-commerce technologies throughout the CSLC? Does it include customers and suppliers within its automated business processes? Have years would indicate a company at Level II.

The next set of questions is germane to competition at Level III.

Does the company have customer information it is not using to build market share and increase profits? Are competitors able to field products and services with a higher degree of quality and customer satisfaction in its target market segments? Can the company share specific customer information with competitors without security breaches, and can it withdraw from some markets and enter others with competitors' left assets? Are there synergies that the company and its competitors can jointly agree on and leverage to lower costs, improve efficiency and increase quality? Is its strategic focus on building relationships, developing intellectual capital and nurturing knowledge workers? Is it prepared to alter its business model radically to remain successful?

Virtual ecosystems, co-operation and electronic markets are going to be at the heart of the breakout e-commerce strategies. The companies that will succeed as the 21st century gets under way will focus on building relationships and exploiting intellectual capital to create opportunities. The real question is, if you do not move to the next level, and do so quickly, how long will you remain in business?

Surfing among sharks: how to gain trust in cyberspace

Summary

Internet merchants face an inherently bigger challenge than their brick-and-mortar counterparts when it comes to winning the consumer's trust. As Sirikka Jarvenpaa and Stefano Grazzoli explain, reputation and size are harder to convey and close customer relationships more difficult to develop in cyberspace than in a traditional physical setting. Tampering and eavesdropping continue to discourage some electronic shoppers, although technology and the law are coming to the rescue. A more serious problem is fraud and the growing number of "fly-by-night" operators attracted by the Internet's low entry and exit costs. The authors document some recent scams and draw on fresh research to advise companies on the best ways to gain customer confidence. Seller size, they stress, is not enough on its own but needs to be coupled with a good reputation and endorsements from independent third parties.

Reputation building

Building a good internet reputation is obviously critical for success in e-commerce. The Amazon.com story is repeated over and over again in corporate board rooms as well as MBA classrooms. But it is worth mentioning here because that company's continued success can be attributed in large part to the huge investment it has had to make to build its credibility as an efficient low-cost provider. At least in the eyes of the company's shareholders, these investments are paying off.

How can an internet merchant build customer trust? As a first step, scores of academic research studies have shown that trust is most readily established when parties have social and legal codes and expect to interact with one another again. Although most of this research is not specific to the Internet, it is almost certainly germane. Websites designed to emphasise cultural homogeneity with the customer (for example, translated into the customer's language), references to address local regulations and business practices, as well as promotional campaigns designed to stimulate repeat business, are all techniques that may encourage the formation of trust.

Some websites have started to include photos and video clips of store owners and staff to overcome the perception that electronic storefronts are too impersonal. But this can prove to be a double-edged sword. What appeals in one part of the world may be off-putting in another. To reinforce the perception of quality service and to boost the number of interactions, some internet stores have started emphasising post-sales contacts, such as order confirmation, stronger product warranties, and customer support.

Specific results about internet consumer trust have been obtained by a group of researchers drawn from the University of Texas, Ben Gurion University in Israel, the Helsinki School of Economics, and the University of Melbourne. The group has studied ways in which online retailers can increase consumer trust and thereby increase the willingness of prospective customers to shop in this new cross-border retail environment.

The researchers have found that consumers recognise differences in size and reputation among internet stores, and that those differences influence their assessment of store trustworthiness, their perception of risk, and their willingness to shop on a particular site. A consumer who believes that there is a physical store (or chain) behind a website is more likely to trust the site on a first encounter. Reputation, however, particularly large in consumers' minds when a site appears to be run by a small player. Interestingly, though, being the

largest site in a particular category (for example, being the world's largest music store) does not by itself seem to affect consumer trust. Seller size has much more influence on trust when it is coupled with a good reputation. Hence there appears to be little payoff from banners boasting about a web merchant's size unless they are accompanied by stories from credible third parties or customer testimonials attesting to the seller's reputation.

Reputation, in short, is far more important in global internet selling than in local retail store marketing.

To an extent, trust can be transferred. Merchants seeking to enhance their reputation might therefore consider cross-linking their sites with other reputable, well-known sites. Trust, however, can also be quickly destroyed. Internet merchants should be wary of applying marketing tactics that could undermine consumer trust. Consider, for instance, the practice known as differential pricing, which involves offering different prices to different customers. If consumers learn that the prices they are offered is greater than the prices offered to their neighbours, trust in the merchant can quickly fade.

Finally, we would argue that things which traditionally engender consumer trust can change in the light of experience in an electronic environment. At least initially, customers who flock to the Internet will assign trust to internet merchants on the basis of the same cues that they use when they interact with their brick-and-mortar counterparts. But positive and negative experiences, both personal and shared, will shape attitudes thereafter. Successful merchants will be those who learn to send the appropriate signals, so that the buying public can surf safely among the sharks.

Gates opens up.

The interview: March 17.

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Websites with a personal touch

Summary

Internet retailers are set to dominate consumer markets. According to John Walsh, they have the potential to combine "corner shop" service with hypermarket prices. Much of their advantage will come from their ability to profile individual customers by tracking their pattern of clicks online. This will enable them to tailor the site to the customer, boosting revenue from consumers and advertisers. The challenge for managers is to collect and use "clickstream" data in a way that people do not consider obtrusive.

Reading the clickstream

Given the potential advantages for consumers and vendors alike, the manager's challenge is twofold: (1) to develop a website that collects the relevant data in an unobtrusive way to which customers will not object; (2) to determine how to analyse the vast quantity of data that will be collected and integrate it into decision-making. For companies with a mass-production mindset, addressing these issues may prove too difficult.

So how do websites collect this useful information? First, people who visit a site for the first time are asked to register, which typically involves giving a name, physical address, e-mail address and perhaps some other demographic data (such as age and income). From the customer's perspective, this is all that needs to be done. He does not have to answer any more questions.

When the customer comes to the site in future, he either types his chosen username and password or more commonly these days, if he is using the same computer, the website recognises him using a "cookie" - a small file that uniquely identifies the computer. In either case, we can associate each subsequent visit with the answers the customer gave on the registration form.

From the manager's perspective, the work is just beginning. Probably the first step is to personalise the user's first experience. The user is made aware of how the site has been tailored for him. If we are running a new site, we can provide information that typically appears in this demographic profile. If we are selling clothes, we can feature items that are usually bought by people fitting this profile.

As the user repeatedly visits our site, we learn more about him as we record the series of "clicks". The information he requests using the mouse. His sequence of clicks (or "clickstream") will be central to personalising the site. Clickstreams reveal what he is really interested in. Perhaps our news sites he always goes to the sports section first and immediately reads about Manchester United's latest victory. Advertisements for Man U's most recent strip could be shown to him with some effect.

Clickstreams allow the website to add behavioural information to the answers given at registration. They are at the heart of Amazon.com's personalised book suggestions. Clixflow, the compact disc vendor, is convinced of the value of clickstream data. It analyses instances where shoppers look at information about a CD but choose not to buy - not only purchases reveal what a person is interested in.

Learning from purchases will not be new to many companies. Consumer goods companies employ armies of analysts to apply advanced statistical models to sales data taken from in-store barcode scanners. However, on the internet, purchase data is a tiny fraction of the total clickstream data to which companies have access.

From the blinks of commerce, knowledge of the customer has been a specialisation of a successful entrepreneur. Early vendors won a customer's patronage by forming a relationship with him, knowing his likes and dislikes and thereby making transactions easier and more pleasant.

In the last quarter of this century, the corner stores that offered this level of service have been drying off in the face of competition from hypermarkets and shopping malls. These important businesses know their customers so well that they can select correctly the goods faced with a choice between two products and alternative service consumers would not be the wiser.

As we look forward to the next century internet retailers - hopefully dubbed "e-tailors" - will dominate their brick-and-mortar foes. How? By offering services more personalised than corner shops could ever contemplate at a price lower than the largest chain stores could profitably charge. In doing so they will use a broad range of high-tech methods to understand each and every customer's unique desires.

On the record

Transactions taking place on the web are effortlessly, easily and automatically recorded as a collection of bits and bytes. The anonymity of cash-based transactions has not made its way onto the web. (Although the concept of "e-cash" has been discussed it is unlikely to retain the anonymity of notes and coins.)

To make a purchase on the web a consumer has to give personal information. Typically, the minimum is credit card details and a postal address although sometimes a short questionnaire may need to be completed. Even where no purchase is made, information may be required.

For example, newspaper websites such as the Financial Times and The New York Times, which are free, ask visitors to use the same username and password when they visit. This information can subsequently be used to analyse reading patterns. How many people read only the headlines but do so every day? How many read each and every article but visit infrequently? The anonymity of browsing through periodicals at a newsstand does not exist on the web, and the information that is recorded can be used by managers' great friends, advertisers.

Big changes have come to the internet and what has happened has caught advertisers and one of the more sophisticated recorders and users of customers' personal data and shopping behaviour. With over 100,000 customers in eight US cities, Peapod's website sells groceries that are then delivered to customers' homes. A list of previous purchases (including brand, pack size and quantity purchased) is kept on the site, so the customer can make minor changes from week to week, saving time and effort.

Peapod creates a database on each shopper that includes their purchase history (what they bought), their online shopping patterns (how they bought), 11 questionnaires about their attitudes and opinions, and demographic data (which Peapod buys from third parties). A shopper's profile is used by the company to determine which advertisement to show and which promotional/electronic coupons to offer. Demographically identical neighbours are thus treated differently based on what Peapod has learned about their preferences and behaviours over time.

Shoppers seem to like this high-tech relationship marketing, with 91 per cent of all sales coming from repeat customers. Manufacturers like it too. The more detailed customer information enables them to target promotions at customers who have repeatedly bought another brand, thereby not giving away promotion dollars to loyal customers.

Connect the dots.

Problem

85,000 minds

Solution

150 Miles

Continued from page 11

market coverage and closer relationships with customers. Naturally this has influenced the speed at which it is developing its Internet activities. The company reports that the Internet is not only more profitable than traditional channels, but that it tends to receive a fairly constant amount of use, even when demand is less steady elsewhere. In Japan, Alamo's Internet revenue has been eight times that from traditional channels.

Royal Caribbean Cruises, one of the world's largest cruise lines, evolved from a "technology" web presence in 1997, through enhancing its brand, to a more recent "Market" focus, achieving significant market growth through on-line sales. By contrast, American Express first focused on brand reinforcement. As one marketing executive stated: "The Internet is where the home run is - when you leverage what you are good at already and you use online in a way that cannot be duplicated. It reinforces what your products and services are, makes them better, and reinforces your brand and what it means." But more recently it has moved into marketing growth through the Internet, for example through helping customers to trade stocks online.

Finally, US broker Charles Schwab had no exposure on the Internet before 1996. But now over 58 per cent of its trading takes place on its website - that is, 58 per cent of its securities every week. The Internet has allowed Schwab to reduce its prices and, more

importantly, to provide real-time, individualised information to customers at very little cost. It is now the largest single Internet trading company.

Companies with this level of success clearly see the new business model which the Internet makes possible for them, and commit to its use on the financial, technical and management resources needed. As Richard Lichfield of American Bank Insurance Group remarked: "It's a bit like ATMs automated telling machines. Everybody was telling them and if you didn't use them, you lost customers. But the Internet, also, reinforces organisations' old channels. It is a real transition in business, one of those points where huge differences can be shown and made."

Succeeding on the internet

Strategic focus is not enough to guarantee success in e-commerce. Further drivers, some quite traditional, are required. The most important are:

- A senior management champion, preferably the chief executive
- A strong and flexible IT infrastructure
- Active support by the organisation's "content owners" (that is, groups and individuals that have chain applications).

Reaching the next level in e-commerce

Summary

Companies need to break with prevailing ways of thinking about e-commerce if they are to exploit information asymmetries and fully leverage relationships with customers and partners, argue **William Kettinger** and **Gary Hackbarth**. There are three levels of strategic sophistication. At the most basic, individual departments take a lead in developing specific internet applications; the result is disparate "islands" of e-commerce initiative not tightly tied to business strategy. At level two, companies incorporate e-commerce to support their current business models by integrating across functional departments. To reach the third level, however, a "breakout" strategy which disrupts the status quo is likely to be necessary. Such a change may be too radical for many companies to undertake immediately. The authors conclude with a list of questions to help executives determine at what level their company is operating.

In the classic 1947 movie "Miracle on 34th Street", Macy's Santa Claus advises parents to purchase hard-to-find toys from the Macy's competitors. While the store loses some sales, this results in droves of satisfied customers seeking Santa's advice, increased store traffic and, ultimately, lots more sales for Macy's.

To achieve this win-win approach in today's age of e-commerce, Macy's must do more than employ a friendly Santa. It must consider a transformational business model based upon information asymmetries. These exist wherever a company leverages customer, supplier or consumer information unavailable to or unusable by its competitors. Today we can go one step further by sharing business information with competitors in a reciprocal relationship to build a "virtual ecosystem". Introduced by James Moore, virtual ecosystems create "co-opetition", where companies co-operate with suppliers (who may also be their competitors) to offer complementary services.

A virtual ecosystem could exploit Macy's brand recognition and sizeable customer base by allowing competitors to sell complementary products and services through portals on Macy's website. This would increase the competitors' own traffic and brand equity. Likewise, a competitor could build a complementary web presence that sells Macy's products and services to enhance its own image.

Re-thinking a business model by exploiting information asymmetries, leveraging customer and partner relationships and finding the right fit of "co-opetition" requires a company to break with prevailing ways of thinking about e-commerce. To achieve this level of sophistication, managers must be able to implement effective e-commerce "breakout strategies".

Products and services are more standardised and more alike in terms of quality than ever before. Consumers therefore find it difficult to distinguish between products simply by comparing physical attributes. They base buying decisions on the information value added to the product and on the customised service associated with it. For example, the personal computer has given rise to a commodity product. Yet Dell Computer has managed to differentiate its PCs by using an e-commerce model in which mass customisation is supported by detailed customer information. The company also continually leverages superior customer support.

In this competitive environment the traditional boundaries between customers, suppliers, partners, information, goods and services begin to blur. The new business ecosystem, partners do not merely add value at each stage of a chain but work together to create new value for the customer. Together they provide an integrated, seamless

a direct stake in the information on the website)

Further reading

- Hagel, J. H and Armstrong, A.E. (1997) *Net Gain*, Boston, MA: Harvard Business School Press.
- Pant, R. and Willicock, L. (1998) *Internet-Based Business Strategies: The Search For Leadership*, Oxford Executive Research Briefing, Templeton College, Oxford, April.
- Willicock, L., Feany, D. and Bell, G. (eds) (1997) *Managing IT As A Strategic Resource*, McGraw-Hill, McGraw-Hill.

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Internet distribution strategies: dilemmas for the incumbent

Summary

Like all innovations in distribution the internet can disrupt businesses as readily as it can transform them. Different industries – and different companies within the same industry – have been affected in different ways. Just as television and later home video extended the film industry's distribution channels, so the internet looks to be expanding the market for retail investment brokers. Travel agents, on the other hand, are suffering as airlines reach out directly to consumers. According to **Nirmalya Kumar**, manufacturers have four choices: not using the net for sales at all, letting resellers use it exclusively, using it themselves, and opening it to everyone in a market-free-for-all. Cannibalisation is a danger – but history suggests that most companies clinging to declining distribution networks for too long.

1. To what extent does internet distribution complement or displace existing industry distribution channels?
2. To what extent does internet distribution enhance or destroy the company's core competences and distribution network assets?
3. How will internet distribution strategy interact with the company's existing distribution strategy?

Existing channels and the internet

Innovations in distribution channels may take two forms – those that complement current distribution channels and those that displace existing distribution channels. For example, supermarkets in the US displaced "mom and pop" convenience stores. The supermarket's value proposition of better assortment, one-stop shopping and substantially lower prices for a little more travel was considerably better than that offered by the mom and pop store. The result was both an absolute and relative decline in the number of mom and pop stores. In contrast, television and later the home video extended the distribution channels available to the motion picture industry.

In the face of the current media types regarding the internet and how it is going to destroy existing retailing systems, it is perhaps useful to spend some time understanding the dynamics between film producers, channels, television, and home video.

When television first appeared in the 1930s, it was seen as a great threat to the Hollywood studios. As a result, the market value of Hollywood studios fell dramatically. A similar story was repeated with channels when home video first appeared. In each instance, two important issues were overlooked.

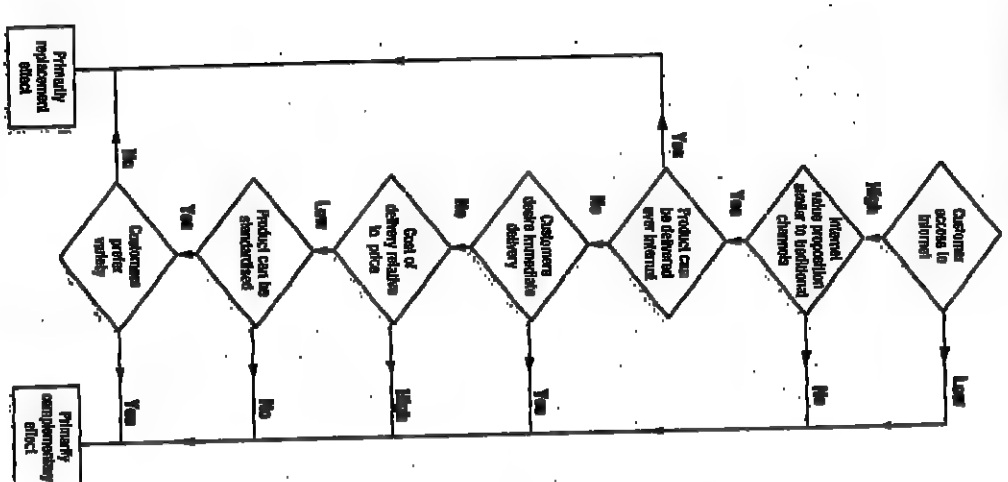


Figure 1: Complementarity versus replacement effect of the internet

and can therefore coexist.

Second, home video gave customers the opportunity to watch movies when they liked, distributed to their homes, as well as when movies were shown in a movie theater. This was a significant advantage for the movie industry, as it allowed them to reach a much larger audience and to generate additional revenue from home video sales.

Third, the internet has the potential to disrupt the movie industry. If the internet becomes a significant distribution channel for movies, it could reduce the need for movie theaters and home video sales. This would be a significant threat to the movie industry.

Fourth, the internet has the potential to disrupt the home video industry. If the internet becomes a significant distribution channel for home video, it could reduce the need for home video sales. This would be a significant threat to the home video industry.

Fifth, the internet has the potential to disrupt the travel industry. If the internet becomes a significant distribution channel for travel, it could reduce the need for travel agents. This would be a significant threat to the travel industry.

Sixth, the internet has the potential to disrupt the retail investment broker industry. If the internet becomes a significant distribution channel for retail investment brokers, it could reduce the need for retail investment brokers. This would be a significant threat to the retail investment broker industry.

Seventh, the internet has the potential to disrupt the motion picture industry. If the internet becomes a significant distribution channel for motion pictures, it could reduce the need for motion pictures. This would be a significant threat to the motion picture industry.

Eighth, the internet has the potential to disrupt the home video industry. If the internet becomes a significant distribution channel for home video, it could reduce the need for home video. This would be a significant threat to the home video industry.

Ninth, the internet has the potential to disrupt the travel industry. If the internet becomes a significant distribution channel for travel, it could reduce the need for travel. This would be a significant threat to the travel industry.

Tenth, the internet has the potential to disrupt the retail investment broker industry. If the internet becomes a significant distribution channel for retail investment brokers, it could reduce the need for retail investment brokers. This would be a significant threat to the retail investment broker industry.

Moving to the net: leadership strategies

Summary

Managers are confused by the way the boundaries of competition and strategic thinking are expanding in the information economy. The result is often failure to implement an effective e-commerce strategy. Where companies do have a strategy, say **Robert Plant** and **Leslie Wilcocks**, they focus on four key areas: technology, branding, service and market growth. Developing technology just to be in the race generally does not pay off – companies with good e-strategies simply "pick up" the technology in developing an information or marketing strategy. The authors' interviews with executives in US and European corporations indicate that the most important success factors include strong leadership, a flexible IT infrastructure and active support by the corporate website's "content owners".

very fast. Three-lined competition has become critical. Companies now need to be able to develop a strategy in "Internet time".

● Learning organisations learn quickly and are able to shift their strategic focus. Development of an integrated information and marketing platform is likely to pay off over time. It should enable deeper understanding of technological capabilities and business possibilities that can be converted into revenue streams.

The transition of technology leadership

E-commerce strategies that are focused on technology are found in all industrial sectors. Technology leadership involves early adoption of an emerging technology to achieve a pre-emptive position in its application for competitive advantage. Many companies are studying, including Citicorp, IBM, Fiat, and Whittier, W.R. Grace and Genentech, began in this quadrant in the mid-1980s.

However, developing technology just to be in the race does not pay off. Companies with good e-strategies learned the technology in the course of developing an information and/or marketing strategy. This enabled them to shift their focus over time to other quadrants. Another effective approach was to develop the technology further for internal use as an intranet or to apply it to supply chain management in the form of an extranet.

An example of shifting focus is provided by the US power utility industry, which uses the internet to buy and sell natural gas, and to make the gas and pipeline capacity. This is maintained by the Federal Energy Regulatory Commission through a system called Cais (Open Access Same Time Information System).

The utilities see their technology leadership strategy as a way to increase and lock in market share, for both residential and corporate customers. While their mission is to reduce their costs, a strategy of increasing their market share, which is made possible at a dramatically lower cost by the internet.

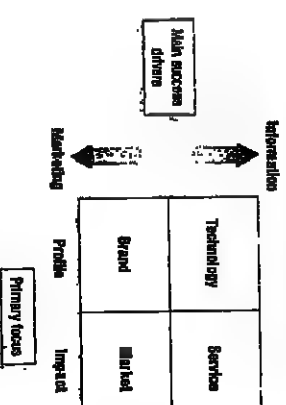
Internet technology boosts the utilities' ability to monitor customers' usage (eventually even individual appliances could be monitored) and to offer suggestions on energy-saving. Their strategic focus is on energy-saving, not "technology" to "market". Competition in the industry is no longer based on the cheapest solution per kilowatt but on the use of technology to add value; the ultimate aim is to allow the utilities to get closer to customers and to create wider market coverage.

Brand as strategy

According to **Lois Gortner**, chief executive of IBM, "branding in a network world will dominate business thinking for a decade or more." This arises from the unique branding opportunities provided by the internet, which are exploited by the often-quoted example of Amazon.com. Although it only started to sell books on the web in July 1996, its revenues for the nine months ending September 1998 were \$67m.

However, many established companies do not

Figure 1: The e-commerce strategic grid



wish to develop a new sales channel at present. Instead they pursue a "brand" focus, of increasing the customer's awareness of and regard for their brand. To do this, a company must add real value by providing information to customers that is not a static quality relationship but a dynamic one, in which the customer's relationship changes and continues to evolve.

BMW is a good example of an advanced brand relationship strategy. In fact, the company has moved its strategy from a "technology" to a "brand" focus. It is now making its site "drive and feel like a BMW". It allows customers to build their own dream cars and even to hear the sound of its M series engine in the 23 Roadster. But unlike Amazon.com, BMW would prefer potential new owners to visit a traditional dealer, not because it lacks the technology to sell via the internet, but because it feels that the relationship between customer and company is best served by face-to-face interaction and bonding.

Even though such Internet channels do not directly generate revenue, they do bring tangible benefits for companies – such as BMW, Citicorp, Land Rover and home handicrafts and leather – that understand the "marketplace". All four companies have tangible returns through feedback from the internet into their retail operations. According to one respondent, "What makes the internet such a wonderful marketing tool is that it shows fairly quickly what works and what does not work."

The service payoff

An obsessive focus on information and the customer is the most effective way to establish service leadership via the internet. Service should not always be expected to translate immediately into purchases by customers. Its value often comes simply in building relationships with, and gathering information about, potential customers. The value-added effect of building customer relationships has been well documented by management consultants such as H&M and Arthur Andersen in their 1997 *Net Gain* Over Time. A group of internet service providers, nevertheless, potential customers and online sellers can build a web-based community of interest that shares information and buys and sells goods and services. A fundamental feature of such networks is that their value increases exponentially even as they grow incrementally. Over time, the companies that nurture them can look forward to more customer transactions and greater revenue.

Other companies have taken less radical – but nevertheless profitable – approaches to service over the internet. Consider UPS, the world's largest package distribution company, which transports more than 10 million parcels a day. It is currently using the internet to position itself as a deliverer not just of packages but of information. UPS's "Document Exchange" service allows its customers to transmit documents cheaply and securely over the internet, with the same benefits – such as package tracking and delivery confirmation – that it offers with physical packages. The internet also makes it easier for the company to customer logics for its customers – for example, by ensuring that parts from different countries arrive where needed at the same time.

The internet is allowing organisations to offer innovative service variations to more and more customers. We found examples in most major ITIL utilities such as Shurey and the US-based FPL Group. FPL Group provides a "Virtual Power Plant" support community activities. FPL Group provides support for customers to carry out their own energy audits, provide annual reports to shareholders. It is becoming possible for multinational companies to offer a level of service previously restricted to their home and major markets to all markets.

In search of market growth

Still other corporations have combined marketing, sales and information to achieve disproportionate growth via the internet. Office Depot, a US-based company, receives 300,000 orders for office products a day through its straightforward, user-friendly internet site. The company aims to retain customers by providing a convenient and friendly service, and also provides real-time inventory checking and customer call centres.

Car rental company Alamo is aggressively pursuing a strategy of being the first to facilitate online



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Journal of Management Information Systems

Markets for everything in the networked economy

Summary

The advent of digital technology marks the beginning of a period of profound economic change. Traditionally new economic institutions will emerge; existing institutions will be transformed. Most of these changes will be information-driven.

The information infrastructure has the reach and ease of access to bring large numbers of buyers and sellers together with great efficiency. It also extends the scope of the economy beyond the barriers imposed by political and geographical barriers. These factors, together with digital technology's inherent capacity to convey information, imply the availability of extensive information on trading opportunities.

Unfortunately, much of this information is not organized, sorted or standardized. It therefore appears to be a chaotic jumble of data, making it difficult to find and coordinate trading opportunities. Thus the need for a new set of agents to manage the information.

Intermediaries will provide rapid and convenient information to economic agents. Much trading mechanisms and many reliable transactions will be automated. Other auxiliary functions include co-ordinating agents, negotiating mechanisms, catalogue services and yellow page services. E-commerce intermediaries will assist in processing demand, supply information and facilitate trade.

Modern economic theory contends that markets are the best way to process chaotic information and allocate resources. Hence e-commerce intermediaries will be designed around market mechanisms (as current trends clearly indicate).

Model markets and real markets

Economic theory holds that markets are the best way to allocate resources, under two assumptions: perfect and symmetric information, and equality of market power among individual agents. In such conditions, allocations are efficient and readily stabilize themselves at equilibrium.

By and large, the real world does not follow economic assumptions of perfect competition. Asymmetries of information yield market power to sellers, and consumers find it unrealistic to acquire information about the wide range of goods that they purchase. This leads to monopolistic competition, where sellers offer "take-it-or-leave-it" prices and consumers rely on such factors as brand recognition, reputation and advertisement. Digital technology is particularly changing this scenario.

With ease of access and broader scope, electronic markets bring many more sellers and buyers to the marketplace. Further, the information available makes available extensive information about the agents. The e-commerce environment allows efficient coordination of this information, both between consumers and via intermediaries. Information is better and better distributed, which creates a much better environment for markets.

Market mechanisms in the physical world are limited by many factors. These include scope, scalability, problems with estimating demand and the difficulty of dynamically updating prices. Digital technologies can go a long way towards overcoming these limitations. They significantly relax the bounds of scope and scalability. They facilitate collection and processing of demand information. Most importantly, they make possible fast and scalable algorithms that can dynamically compute prices on the basis of supply and demand schedules. These in turn can give rise to sophisticated market mechanisms (for example, various types of auction) which dramatically improve the efficiency of allocations.

Market applications

These benefits are not restricted to existing markets. The real world abounds in problems of

Digital technology will have far-reaching impacts on economic markets. Here Andrew Whinston, Manoj Parameswaran and Jan Stallaert provide an overview of the likely developments. Perhaps the most important will be increasing use of market mechanisms to solve resource allocation problems, this will be made possible by the Internet's capacity to carry information swiftly among large numbers of economic agents. At the same time, a new breed of e-commerce intermediary is emerging to supply information and facilitate trades; over time, various forms of auction may displace the conventional posted price system. The virtual environment makes possible unprecedented customisation and bundling of products, and companies that leverage these and other features will be more successful than those that try to mimic traditional business models.

Resource allocation that are not resolved by traditional market mechanisms. Examples include energy, resource allocation, flight scheduling, traffic management, distributed databases, radio frequency allocations, knowledge sharing, class scheduling, and many more.

The traditional view is that markets are a means for exchanging resources whose value is expressible in money terms. Most of these allocation problems tend to be complex, with participants and resources distributed over various locations. Valuation can be difficult, and may need to be updated constantly.

Digital technology's ability to collect information from distributed sources and to process it through fast algorithms opens the possibility of using market mechanisms to handle all sorts of problems more efficiently. Indeed, new electronic markets are being increasingly used in the fields of electric power, radio frequency allocations, flight scheduling and traffic management.

The potential scope for market mechanisms extends far beyond these current trends. For instance, consider a corporate information system that is used by personnel from different departments. The flood of complex queries is served on a first-come, first-served basis with no differentiation between the relative importance of requests. But with today's market mechanisms, market queries can be differentiated and computing resources allocated more efficiently.

Another example would be a supply chain system, where markets can be set up to determine inventory sizes and allocations dynamically. A crucial advantage of using markets in these scenarios is the fact that markets do not just process information, they also provide it. In all these allocation problems, feedback about demand and usage patterns will be provided by the market. These can lead to the design of systems that make better use of the resources in question.

Types of market

A striking feature of the digital economy is the variety of market institutions that it supports. In business-to-consumer and consumer-to-consumer e-commerce, a mix of posted price systems and various types of auction markets are currently in evidence.

Posted price systems, by and large, represent a quick variation of mail order shopping to the Internet. However, many companies are realizing the advantages of the more complex mechanisms that can be supported by electronic markets (see sidebar 1 and 2). Innovative business models have come into existence; these include novel uses of bundling and customisation, the "free" bundled market-based intermediary that conducts auctions for a variety of goods.

Many of these intermediaries are driven by expediency; they aim to make quick, short-term profits by exploiting the immense potential of the market. Theoretical or practical initiatives to identify suitable, long-term market mechanisms – on which the future of electronic commerce will depend – are yet to emerge.

Currently, the markets predominantly use English auctions. In an English auction buyers submit bids for (multiple units of) an object. However, the fact that the Internet brings together a high number of buyers and sellers, whose valuations can be processed and matched quickly by software, argues the case for double auctions as a sustainable digital market mechanism.

In a double auction, buyers as well as sellers submit prices at which they are willing to buy or sell goods. A useful analogy is provided by financial markets, where large numbers of buyers and sellers converge, and demand and supply change dynamically. Double auctions have come to provide efficient markets for financial assets. The current pre-dominance of English auctions on the Internet is largely due to the fact that companies are simply transferring the most widely used world auction mechanisms to the digital world. However, as the potential of the digital environment becomes apparent, so to will the efficiency of double auctions.

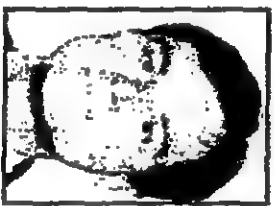
Double auction markets will be built around intermediaries, as they require a "marketmaker" to match trades. These intermediaries will compete on several dimensions, such as fees, the number and reputation of participants they bring in, efficient matching algorithms, reliable and secure transactions, post-purchase customer service, and



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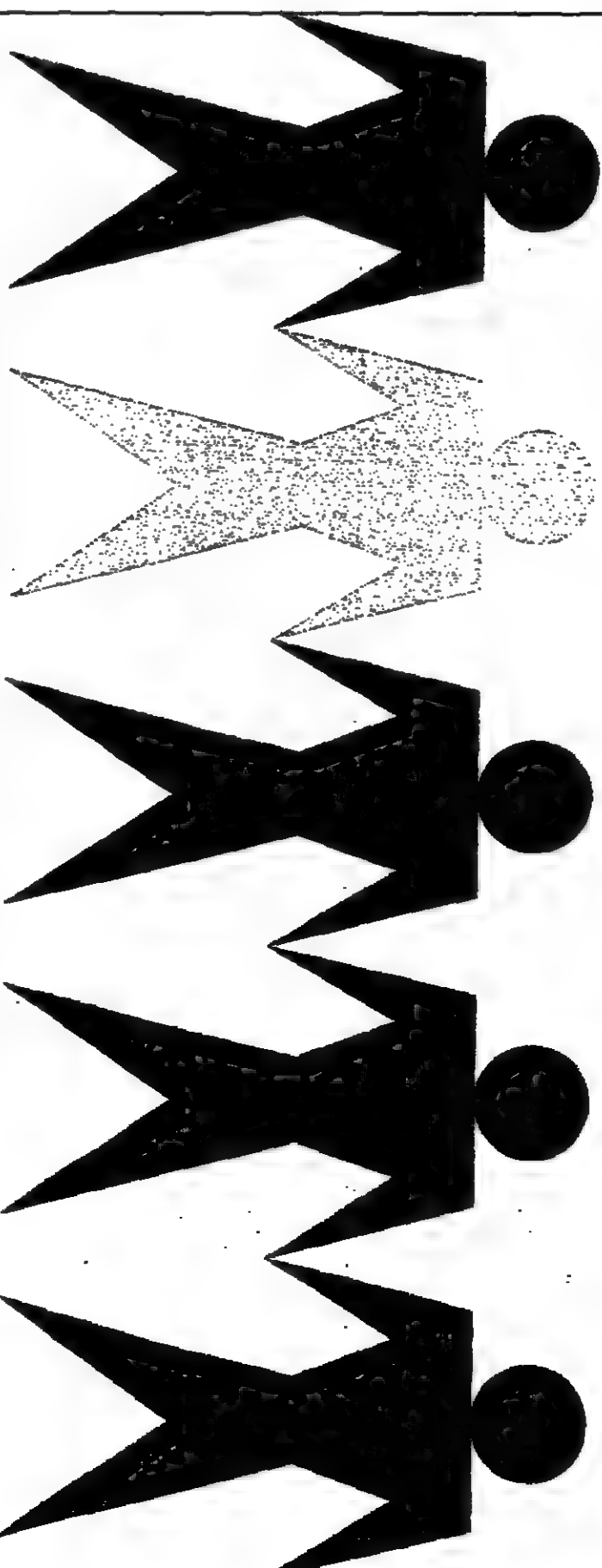


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Jan Stallaert is a visiting assistant professor at the University of California, Los Angeles, and a researcher at the Center for Research in Electronic Commerce at the University of Texas in Austin.

Continued on page 10



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Week 11

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INSIDE

US making a meal of UK engineering

No conversation with a British engineering executive is complete without a dark reference to US bankers running slide rules over the lowly-rated UK sector. One chastened executive explained why his company was about to be taken over by a US group. "We didn't do the deals," he said. "And the expression here is 'dine or be dinner'." Page 18

Eyes on rates as Lafontaine fades

After the excitement surrounding the shock resignation of Oscar Lafontaine (left) last week, markets will return to the more mundane task of assessing the relative economic performance of the large economies. Data from the US, minutes from the Bank of England and the first post-Lafontaine meeting of the European Central Bank will keep analysts busy. Page 24

Dow Jones set for five figure mark
The Dow Jones Industrial Average pulled up just short of the 10,000 barrier on Friday but, if this week's economic news confirms the picture of a domestic economy roaring ahead with no imminent danger of inflation, it should soon break through into five digits. Page 23

Oil market hopes the rally will hold
Oil companies and traders will be eagerly awaiting evidence this week as to whether the latest attempt by the world's leading petroleum exporters will succeed in pushing prices back to the \$15-\$21 a barrel range. Page 21

Bank of Japan to boost Nikkei
Information from the Bank of Japan is expected to clarify monetary policy and add to the improved sentiment that last week helped lift the Nikkei 225 Average by 4 per cent. Page 23

Dow Corning changes focus
The past five years have been traumatic at Dow Corning. The maker of silicone-based products has been in Chapter 11 bankruptcy protection and its name has become associated with breast implants and the suffering they are alleged to have caused millions of women. As the company begins to extricate itself from protection, it is seeking to refocus attention on the non-implant side of its business. Page 22

Greeks try their luck with shares
Popular capitalism has arrived in Greece. A fall in interest rates on government bonds has sent investors to the stock market in droves and pushed share prices to record heights. Page 22

Endesa
On Friday, March 12, 1999 the Financial Times erroneously reprinted an advertisement for Endesa SA which originally appeared in the Financial Times on February 18 1999. This was an error on our part: we were not requested to run this or any other advertisement by Endesa. We regret any confusion this may have caused.

FT GUIDE TO THE WEEK

— full listings Page 34

MINISTERS MEET TO PROTECT CULTURE
Diplomats from 100 states meet in The Hague tomorrow to finalise a protocol strengthening the 1954 Hague convention on the protection of cultural assets during armed conflict.
ST PATRICK'S DAY CELEBRATIONS
President Bill Clinton hosts St Patrick's Day celebrations at the White House on Wednesday. Nobel winners John Hume and David Trimble will attend, as will Sinn Féin leader Gerry Adams and Senator George Mitchell.
EU REPORTS TO WTO ON BEEF DISPUTE
On Friday, the dispute settlement body of the World Trade Organisation meets in Geneva to hear a progress report from the European Union on compliance with a WTO ruling against its ban on hormone-treated beef.

COMPANIES IN THIS ISSUE

ABB Siemens	8	KPN	19
AT&T	21	LVNH	20
Arthur Andersen	17	MIH Holdings	20
BMW	8	Microsoft	1
BNP	19	Modular Ink Tech	1
Berkshire Hathaway	17	Mol	20
Brammer	17	Nissan Motor	22
China Airlines	20	Noriel	1
Crédit Lyonnais	17	Olivetti	20
Dow Corning	22	Oracle	20
EI	2	Petroneas	20
Federal-Mogul	20	FJR Nabisco	22
General Electric	19	Renault	22
Guoqi	20	SK Corp	18
Hewlett-Packard	1	Ssangyong Oil	18
Home Box Office	1	Telecom Italia	17
Ind. Newspapers	18	Thomson CSF	18
Imil	1	Xaar	18
Japan Tobacco	20	Zelus	18

MARKET STATISTICS

Base lending rates	24	Foreign exchange	24
Benchmark Govt bonds	24	London recent shares	22
Companies diary	23	London share service	26-27
Derivatives and company migs	9	Managed funds service	29-30
FT/S&P-A World Indices	31	Money markets	24
FT Bond Index Index	23	New mid bond issues	24
FT Guide to currencies	22	Stock markets at a glance	33

40,000 REDUCTION OF WORKFORCE TO BE SPLIT BETWEEN DISPOSALS AND CORE OPERATIONS

Telecom Italia plans huge job cuts

By Hugo Dixon and Vincent Boland

Telecom Italia is planning to reduce its staff by about 40,000 as part of the restructuring announced last week to thwart Olivetti's hostile €53bn (\$57.5bn) bid.

fixed-line telecommunications operations.

The job cuts have not been announced, in part because of fear of provoking a union backlash.

Last week, the Telecom board announced plans to cut annual pre-tax costs by £1,000m (\$66m). The management, led by Franco Bernabe, is understood to feel confident that it can exceed this target if the job cuts are implemented in full.

The board also promised the divestiture of all non-telecommunications assets, including

its vast property portfolio. This divestiture programme would further reduce staff numbers.

Telecom Italia has also promised to generate £1,250m a year from the integration of Telecom Italia and Telecom Italia Mobile, its 40 per cent owned mobile subsidiary.

Telecom Italia is offering the minority shareholders in TIM shares in Telecom Italia. It would then use TIM as its vehicle for addressing mass

market customers, while Telecom Italia itself would focus on business customers.

Investment in Telecom Italia's ordinary fixed-line network would be substantially cut and resources channelled to mobile communications, data and the internet.

Tim would be kept separate for the time being. This is because Mr Bernabe is worried that the much larger Telecom Italia could infect TIM with its inward-looking culture. He is also concerned that the group should not be diverted by a full merger at a time when it is

facing an onslaught from competitors.

Telecom Italia shareholders have given a lukewarm response to its defence strategy. Investors welcomed the restructuring and ownership rationalisation plans, but US shareholders were unhappy that the conversion of savings shares to voting stock would dilute their holdings.

The terms of the buy-out of savings shareholders in TIM are less attractive than for those who hold voting shares.

Lex, Page 16

Buffett attacks the 'tricks' of US accounting

By Richard Waters in New York

Warren Buffett has delivered a broadside over the state of US accounting, describing the attitude of many US executives to financial reporting as "a business disgrace".

Writing in his annual report to shareholders, Mr Buffett also accused the big accounting firms of "kowtowing" to management and, in some cases, proposing accounting tricks to flatter a company's earnings.

The comments came as Mr Buffett revealed details of a rare year in which the equity investments of Berkshire Hathaway, his holding company, failed to match the gain in the broader stock market. The Omaha-based investor said the sale of the com-

pany's holding in McDonald's was "a very big mistake", and admitted that his decisions on buying and selling stocks last year only served to cut investment gains.

"Overall, you would have been better off last year if I had regularly snuck off to the movies during market hours," he told Berkshire shareholders.

Mr Buffett's comments on accounting amount to the most vitriolic attack on current practice from the head of a large American company since Arthur Levitt, chairman of the Securities and Exchange Commission, launched a campaign last autumn to clean up companies' accounts.

"Many managements purposefully work at manipulating numbers and deceiving



Warren Buffett: "Many managements purposefully work at manipulating numbers and deceiving investors"

investors" when it came to mergers and big restructurings, Mr Buffett said.

While admitting that there is nothing new in manipulative accounting, he claimed that "in recent years, probity has eroded".

When announcing a restruct-

uring or a merger, companies frequently overstated one-off charges, a practice that reduced their future expenses and so flattered earnings in later years.

During mergers, "major auditing firms sometimes point out the possibilities for a

little accounting magic (or a lot)," he said.

Berkshire Hathaway paid \$160m last year for General Re, a reinsurer, but according to Mr Buffett the company had resisted the temptation to use the occasion to boost its reserves artificially.

Crédit Lyonnais sale will limit bids to 10%

By Samer Iskander in Paris

Institutional investors will be allowed to bid for stakes of up to 10 per cent in Crédit Lyonnais when the French bank's long-awaited privatisation gets under way this month.

The limit, detailed in a decree published yesterday in the French official journal, is higher than expected and may attract more potential core shareholders.

No minimum holding period has been set for core shareholders, who in total will hold

less than a 33 per cent blocking minority. The decree said only that bidders had to be "committed to the stability of their holding".

The government said publication of the decree "confirms its will to turn a page in the history of Lyonnais".

It launches the last sell-off of a top-tier French bank and concludes a long battle between Paris and Brussels over the fate of Lyonnais, which nearly collapsed in the early 1990s following a reckless expansion.

Analysts believe the relative flexibility of the privatisation's terms increases the bank's attractiveness to potential core investors.

But the privatisation comes a week after a dramatic double bid by Banque Nationale de Paris for Société Générale and Paribas, which is likely to distract three of the four French banks to have publicly said they were interested in buying large stakes in Lyonnais.

The fourth is Crédit Agricole, the mutually owned bank, which is the country's

largest in terms of deposits. Axa, the French insurance company whose chairman Claude Bébéar backed the BNP project as a director on BNP's board, is also interested in taking a stake. So is Allianz, the German insurer, which already controls almost 3 per cent of Lyonnais's non-voting shares through its French subsidiary AGF.

BNP's unsolicited bid for its rivals was partly motivated by the rebuff to its offer last month to guarantee the jobs of Lyonnais's 30,000 employees in

exchange for a leading role in the privatisation. If successful, the bid would create the world's largest bank, with assets of around \$1,000bn.

The large institutional investors, which will be offered up to 33 per cent of Lyonnais, will pay a premium over the price of shares offered to the public. About 50 per cent of the capital will be floated on the stock market, while the state will retain 10 per cent and Lyonnais employees will be offered up to 5 per cent at preferential terms.

Andersen poised to poach practice from rival

By Jim Kelly in London

Arthur Andersen, the global Big Five accounting firm, is poised to poach a leading national practice from a rival international firm. The move would mark its biggest success yet in a campaign to attract disaffected partners from its leading competitors.

High-level talks on the proposed merger, understood to involve an entire national practice of a rival firm in a G7 country, were suspended on Friday as last-minute difficulties emerged over the deal, which would significantly boost Arthur Andersen's 1998 \$6.1bn global revenues.

The firm, which is engaged in a protracted legal divorce from its sister firm Andersen Consulting, has embarked on a policy of poaching firms and partner teams from its rival international networks, with recent successes in Chile, Brazil and Germany.

Most of the Big Five are global networks linking autonomous national firms. All are in the process of building international organisations.

Arthur Andersen is widely seen as the most closely integrated of the Big Five, having grown as one organisation from its US roots.

But the looming split with Andersen Consulting, the subject of binding arbitration at the International Chambers of Commerce in Paris, will leave the firm at the foot of the Big Five league - although it may be awarded substantial damages, which could fund further growth.

"If this deal comes off it would be a big boost to Arthur's," said a partner at a rival firm. "It would also seriously call into question the global ambitions of the firm which is under threat. This is a practice they cannot afford to lose."

It is understood talks have been suspended to allow regional partners to be consulted.

There was widespread speculation on Friday over which rival Big Five firm - PwC, Ernst & Young, KPMG, or Deloitte Touche Tohmatsu - was the target of Andersen's raid. PwC, created by a merger last year, is understood not to be involved this time.



PHILIP COGGAN
GLOBAL INVESTOR

A share buy-back too far

Motherhood, Apple pie. Share buy-backs. All of these are universally acknowledged to be good things.

But might the passion for share buy-backs have been carried too far? The main argument for them is simple: if companies have too much cash, and not enough profitable investment opportunities, they should return the capital to shareholders who can invest it elsewhere. Not only does this make economic sense, it is good practice in the world of corporate governance.

But this is not happening. In the UK, there was a net return of more than £20bn (\$48.3bn) of cash to shareholders last year (through buy-backs and cash takeovers), while in the US the figure was \$158bn. It would seem there are not enough new and attractive projects.

That does seem a little difficult to square with the high valuations placed on stock markets on both sides of the Atlantic which might appear to suggest that the outlook for the corporate sector is rosy.

But it is possible to overcome that point. For a start, high valuations on the stock market owe much to low inflation, bond yields and short term rates, secondly, companies are in fact continuing to invest money. In the US, according to John Youngdahl of Goldman Sachs, real business fixed investment purchases during the first three quarters of 1998 were 73.5 per cent above those in 1991. The Fed estimates that

the manufacturing capital stock is growing at twice the historical rate. In the UK, total business investment increased by 11 per cent last year.

That expansion is being financed by debt, not equity. US companies are borrowing money to invest and to buy back shares. The net addition to non-financial corporate credit market liabilities in the year to September was \$59.5bn. That represents the highest absolute figure on record and a 72 per cent increase on the previous 12-month period.

Corporate finance theory is on the companies' side. With cash earning so little, and with debt tax-deductible, buy-backs improve both old-fashioned earnings per share measures and more fashionable yardsticks such as economic value added.

However, profit growth in the US and the UK is clearly declining. Profits for the S&P 500 companies grew by only 0.4 per cent in 1998, according to information company IBES International, and even with economic growth still strong, are expected to grow by only 5 per cent this year.

Corporate managements are therefore deciding to replace equity with debt at a time when their profitability is declining and when share price valuations are at historical highs. Never mind what theory states, common sense suggests there is something wrong.

Old UK market hands may remember a company called International Business

Communications, a financial newsletter and communication group. In February 1989, the company had the bright idea of buying back 40 per cent of its share capital at 140p per share, weighed down by debt, the company struggled in the face of high UK rates. The shares were suspended at 31p in September and eventually relisted, after restructuring, at 4p.

This cautionary tale might remind the odd director that gearing can occasionally be a four letter word. At the moment, however, executives have every interest in exaggerating their company's risk profile.

Corporate managements are clearly being judged these days on the basis of shareholder value, and all too often this translates merely into the short term appreciation of the share price. Executives have a heavy personal motivation to emphasise short term gain, in the form of share option schemes.

This adds up to a recipe for disaster. But who will know when to call a halt to the buy-back craze? It hardly seems likely that investment banks will take a self-denying ordinance to turn down the business. And each successive buy-back only forces institutional investors to chase the market higher.

One final thought: if companies do become risk averse, and cut back on their buy-backs, will investors have to start worrying about dividends again?

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Fattening up in a fight to stay off the US dinner plates

The lowly-rated UK engineering sector is attracting interest from potential predators across the Atlantic. **Michael Peel reports**

It was a chastened engineering company executive who explained why his company was about to be taken over by a US group. "We didn't do the deals," he said. "And the expression here is 'dine or be dinner'."

It is a common sentiment among engineers these days. No conversation with them is complete without a dark reference to the slide rules that US bankers have for some time been running over the lowly-rated UK sector.

Some observers argue that the analysis is already close to producing results. They think a number of US companies have prepared takeover bids that will be triggered if their intended targets report reasonable results this month.

As one corporate financier puts it: "The US guys are looking at the companies and thinking, 'They look cheap but if the business is going away then they don't look too hot. So we will sit out for the next set of figures before we think about doing something'."

Early indications are that the performance hurdle will be cleared. In the past two

weeks BBA, IMI and TI Group have all turned in results that show trading has held up despite the global economic slowdown.

The good results have lent weight to the argument that UK engineering groups offer some rare bargains to predators. The sector trades on a multiple of historic earnings of about 13.5, a quarter less than its US counterpart.

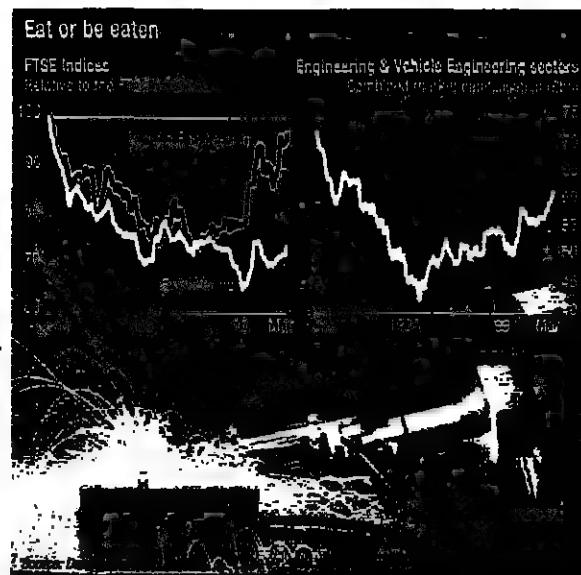
That divergence reflects the dramatic fall in the value of UK engineers since June, when investors began to worry about the effects of a drop in demand and the strength of the pound. The engineering and engineering vehicles sectors, which had a total capitalisation of £72.5bn nine months ago, now weigh in at about £58.8bn and account for a mere 4.1 per cent of the FTSE All-Share. In the past year, the engineering sector has underperformed the UK stock market by about 18 per cent.

Against that background, it seems surprising that there have been relatively few takeover attempts so far. Apart from the bidding war for LucasVarity, the most notable events have been

unsuccessful approaches for Berisford, the kitchens and kitchen equipment group, and Weir Group, the Glasgow-based pumpmaker. Some bankers think US engineers have been held back by a reluctance to pay the large premiums that have characterised deals to date. At the extreme, as in the acquisition of Adwest by Dura Automotive Systems, the US suitor can find itself paying a premium of more than 100 per cent.

Others point to a reluctance to spend a chunk of time in the UK arranging deals with companies that are fairly small by US standards. US groups know, too, that most boards are likely to put up a fight as long as the sector is stuck at historic lows. As one corporate financier says: "They [US groups] really have been looking a lot but they never actually make the approach once they discover these deals are very hard to do."

The most vulnerable UK groups are generally held to be those with market capitalisations of between £100m and £1bn. The larger concerns tend to be more diversified, meaning they are less



likely to offer a good fit with a potential predator.

Bigger outfits such as BBA Group and Smiths Industries also enjoy some protection from their ratings, which tend to be higher than those of the smaller engineers. "Smiths would not be a big bite for a huge American corporation," says someone close to the group. "But it would be an expensive bite."

Those groups that are less favoured by the market are having to look at alternative

methods of shoring up their positions. Adopting the "eat or be eaten" principle, medium-sized concerns such as Weir, Berisford and TI Group have indicated that they intend to grow by making sizeable acquisitions.

In a variation on this theme, TI last week announced that it was teaming up with Kohlberg Kravis Roberts, the US investment group, to help it identify bid targets. KKR paid £94.4m for a 4.9 per cent stake in the

group, with the option of raising its holding to 9.9 per cent.

It seems unlikely that KKR is the only US venture capitalist investigating the UK engineering sector. "There is no doubt that the US buy-out funds are here," says one banker. "But they face significant costs in terms of lawyers and accountants. They are quite happy to have a look but they need to know they have got a good chance."

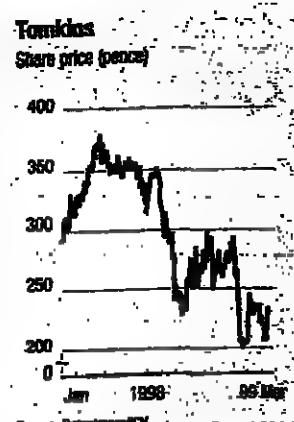
The potential buyers may be cautious at present, but there is enough surreptitious activity to create a sense that a transatlantic swell may be about to engulf the UK engineering sector. A number of US value investors have already made the crossing, attracted in part by dividend yields that are on average more than twice those offered by US rivals.

Many think the UK reporting season might serve as the trigger to convert the undoubted US corporate interest into action. As one banker puts it: "Your classic piece of merger and acquisition advice is: if there are results coming out you have to look at them before making your move. I would expect that things will pick up shortly."

COMMENT

Tomkins

Greg Hutchings, Tomkins chairman, probably - if secretly - still sees it as an admission of defeat. But a chunky share buy-back is surely the right thing for his company. The company has spent more than £700m (£1.13bn) on acquisitions in 1998, some £200m on capital expenditure and still the balance sheet is woefully undergeared. The company's average net debt in the first half was about £125m, compared to a stock market capitalisation of £2.6bn. The odd thing is that having finally conceded that buy-backs had a role to play in tightening up the balance sheet, the company should have been so half-hearted in practice: a mere £140m - or just over 5 per cent of the equity - has been bought back this year. Yet the shares can hardly have looked pricey. A buy-back should not be seen as a poor man's alternative to a glamorous acquisition. Investors tend to back smart deals.



Cyclical/non-cyclical stocks

Guess what? Dying is a cyclical event; being ill, apparently, is not. This is one oddity to emerge from the reshuffle in the FTSE classification system, which will group services (such as pharmaceuticals and funeral directors) and consumer goods according to how cyclical their earnings are. Quirks aside, how useful will the exercise be? It may have some merit if it helps investors pick their way through a sector like retail, which spans defensive stocks like supermarket chains and cyclical plays such as high-street furniture stores. But relying too heavily on the classification risks oversimplifying things. A vertically integrated industry like brewers (moving into pubs/restaurants) has both cyclical and non-cyclical characteristics. Furthermore, it is not clear how a relatively new industry like mobile phones performs in a bad recession.

But the big risk with the new FTSE classification is that investors fail to look behind the cyclical tag and rush for all exits at the first sign of an economic downturn. Like Trotsky's unhappy families, cyclical industries are cyclical in their own way. Some are hit later than others by recession. Furthermore, economic cycles differ. A sector hit in one recession may not get so clobbered next time. And airlines, for instance, are not just exposed to the UK economy. Investors should not hope stockpicking will get any easier.

Ind. Newspapers in SA offer

Independent Newspapers, the media and communications group, is offering R36.50 a share to South African minority holders of Independent Newspapers Holdings, in a R406m (£65m) bid for the 24 per cent it does not already own.

If the offer - a 43 per cent premium on the current share price of R18.50 - is accepted, it will bring the value of the group's investment in the country to more than R1.3bn.

Xaar makes Swedish buy

Xaar, the Cambridge-based ink jet printing technology group, is to acquire Modular Ink Technology, Stockholm, for £5.5m.

At the same time, MIT's largest customer, Olympus Optical, is to subscribe £12m for 3.23m new ordinary shares in Xaar, giving Olympus a 4.1 per cent stake in the enlarged group.

The vendor is Pelikan Productions and Nu-Kote International, its immediate holding company.

Boost for Brammer in TIS calibration deal

By Suzanne Doyle

Brammer, the industrial services group, is today expected to announce a £66m boost to its electronic equipment rental and management business - part of its efforts to increase its outsourcing activities.

The group, which announces its annual results tomorrow, is buying a controlling interest in TIS, the instrumentation services arm of Thomson CSF of France, for up to FF7.5m (£770,000). The addition to Brammer's Livingston Services business will make the group Europe's largest independent provider of calibration

management services. The acquisition will bring with it a £66m five-year contract to calibrate and maintain electronic test and measurement equipment for Thomson CSF throughout France.

Brammer, which has seen its industrial parts distribution division hit by the economic slowdown in its manufacturing customer base, has been trying to increase the higher-margin Livingston business. Last year it won a £16m five-year contract with KPN Telecom, the Dutch group.

Brammer is keen to identify groups holding large inventories of test and

measuring equipment and encourage them to outsource the work. David Hollywood, chief executive of Livingston, says the group can increase quality and customer service while reducing costs. It can provide management, purchase, maintenance and disposal services.

Brammer will buy the remaining stake in TIS for a maximum of FF7.5m between March 2000 and March 2001. Analysts expect Brammer to announce pre-tax profits of about £23m - and estimates that £7.5m of that, on £50m turnover, will come from Livingston as expected to be exceeded.

Internet invention pays off for Cambridge pair

By Christopher Price

Two graduates from Cambridge, England who started their internet business in a bedroom four years ago, are in talks with US venture capitalists on the sale of a stake that will value the company at about £30m.

They rejected a much higher offer from a large US computer group, opting to stay independent with a view to a lucrative flotation in the next year or two.

Adam Twiss and Damien Reeves founded Zeus in 1995 while still at college. It produces software enabling companies to develop their web sites and has signed up some of the biggest names in

the computing world as partners.

Mr Twiss, 23, said the eight-strong company had received numerous overtures from US companies. One US computer group is understood to have offered to buy the company for more than £30m. But "it is not in our game plan to be part of another company. We believe we can grow to dominate the market for software for high-end servers."

Zeus's deal with venture capitalists, which is expected to be concluded shortly, is the latest in a wave of US money targeting young British internet companies.

Mr Twiss, whose 42 per cent stake would be worth

almost £13m after the fund-raising round, says the company was born out of the inability of existing software to cope with the demands put on servers by the internet. He and Mr Reeves, 25, who also has a 43 per cent stake, were running a web site in their spare time. After writing software to tackle the problems, they posted it free on the internet.

The interest they received convinced them to start Zeus. Their partners now include Silicon Graphics and Hewlett Packard, two of the biggest computer manufacturers in the world. Among its customers are Cable & Wireless and Demon Internet.

1998 Results

The Board of Directors met under the chairmanship of Mr. Francis Mer on March 10, 1999 and reviewed the final consolidated accounts of the Group and approved the accounts of Usinor, the Group's parent company, for the 1998 financial year.

Millions of € Millions of FRF	Core Activities	Discontinued Activities *	Total 1998	1997
Net sales	9,575	1,374	10,949	10,878
	62,812	9,012	71,824	72,001
Operating income	353	62	415	546
	2,318	404	2,722	3,580
Net income	517	-182	335	313
	3,352	-1,194	2,158	2,055
Profit per share **	-	-	FRF 1.43	FRF 1.29
	-	-	FRF 9.50	FRF 8.43

* Long Specialty Steels (Unimetal and its subsidiaries, Accimet and its subsidiaries, Sogefal, ...)

** excludes treasury shares at December 31, 1998.

Other than the deconsolidation of Vallourec and Forcart, fully consolidated until June 30, 1997, the principal changes in the Group's scope of consolidation relate to the full consolidation of Fabrique de Fer de Charleroi-Faer (Belgium) on January 1, 1998 and La Magona d'Italia (Italy) and Thainox (Thailand) in the second half of the year, and to the deconsolidation of Valdunes and UGO (France) for the year ended December 31, 1998. Acesita/CST (Brazil) and Arvedi (Italy) were consolidated using the equity method during the fourth quarter of 1998.

The consolidated accounts for 1998 show net income of € 335 million.

Consolidated Net Sales in 1998 reached € 10,949 million compared to € 10,878 in 1997, with contributions from Flat Carbon Steels (56%), Stainless Steel and Alloys (22%) and Specialty Steels (23%).

In 1998, 32% of net sales were realized in France, 46% in other European countries, 12% in the United States and 10% in the rest of the world. Asia represents 2.5% of total net sales.

Operating income was € 415 million, i.e. 3.8% of sales compared to € 546 million in 1997 (5% of sales). Flat Carbon Steels accounted for +6.9%, Stainless Steels and Alloys for -4% and Specialty Steels for +4%. The continued deterioration of sales prices for Stainless Steels paired with a destocking movement during the last quarter of the year resulted in a 24% decrease in operating income compared to the previous period.

Net income of € 335 million includes the effect of the application of accounting standard IAS 12, mandatory since the beginning of 1998, resulting in tax profit being shown for € 453 million during the period, and the application of accounting standard IAS 36, mandatory as of 1999 but applied in advance, resulting in the depreciation of tangible and intangible assets totaling € 315 million. This depreciation of assets concerns J&L (€ 38 million), Thainox (€ 58 million), Unimetal and its subsidiaries (€ 201 million) and Schmidag (€ 18 million).

Excluding the effects of these accounting standards, the Group's net income would have reached € 197 million.

Millions of € Millions of FRF	1998	1997
Net cash provided by operations	1,005	897
	6,591	5,893
Industrial investments	620	629
	4,096	4,125
Total shareholders' equity including minority interest	4,555	4,305
	29,882	28,240
Net debt	2,075	889
	13,612	5,829
Net debt/equity	0.46	0.21

Net cash provided by operations amounted to € 1,005 million compared to € 897 million in 1997. This improvement is mainly due to a decrease in working capital requirements itself due to a notable decrease in business activity toward the end of the year.

Industrial investments of € 620 million are in line with the level of accounting depreciations and the Group's policy for the allocation of resources.

Net Debt at December 31, 1998 amounted to € 2,075 billion compared to € 889 billion at December 31, 1997. The increase of net debt reflects strong external growth during the entire period. The net debt/equity ratio was 0.46 compared to 0.21 at December 31, 1997.

Prospects

End-user demand has remained steady and, although the increase in orders for flat carbon steels and stainless steels has not yet resulted in an increase in sales prices during the first quarter of 1999, such increase could be the sign of a trend of restocking. With respect to Stainless Steels, prices have increased since the end of the year, particularly in Asia. For Flat Carbon Steels, a return to normal inventory levels and a halt in declining trends for basic products have been noted. Price increases have been announced for the second quarter in this sector in Europe.

Despite strong pressure on prices, annual contracts have been renegotiated close to the previous year average. This was mainly due to a sustained demand from large clients in the automotive and white goods industry for high technical content products which are concerned by contracts.

After the integration of Cockerill Sambre and the conclusion of the sale of the Long Specialty Products activities, the net debt/equity ratio should be approximately 0.50 by June 30th, 1999.

The acquisition of 53.77% of Cockerill Sambre (Belgium) has been finalized February 9, 1999. The tender offer allowing Usinor to increase its participation to 75% is currently under way. This acquisition confirms the Usinor Group strategy aiming at developing its share in markets of high value-added products. Net consolidated sales of the COCKERILL Sambre Group reached € 5,270 million in 1998.

Dividend

The Board will propose to the shareholders at the Annual General Meeting, the payment of a net dividend on July 1, 1999 of € 0.48. This corresponds to a pay out of 33%.

Tomorrow's steels have a name
USINOR

Net income
€ 335 million
(FRF 2.2 billion)

Shareholders
equity (including
minority interest)
€ 4,555 million
(FRF 29.9 billion)

Dividend per share
€ 0.48
(FRF 3.15)

Investor Relations
13, cours Valmy - La Defense
92070 La Defense Cedex
France
tel: (33-1) 4725 98 98
fax: (33-1) 4725 92 80
Internet
http://www.usinor.com

LIQUIBAER

Notice is Hereby Given of the Annual General Meeting

to be held at the Britannia AB Room,
Hyatt Regency Hotel, Grand Cayman, Cayman Islands,
on the 29th day of March, 1999 at 9.30 a.m.

AGENDA

- To receive and consider and, if thought fit, adopt the accounts presented by the Directors for the year ended 31st December, 1998 and the reports of the Directors and Auditors.
- To ratify the acts of Directors.
- To approve the appointment of PricewaterhouseCoopers as Auditors and authorize the Directors to fix the Auditors' remuneration.

By order of the Board

LIQUIBAER Julius Baer U.S. Dollar Fund Limited, P.O. Box 1100, Grand Cayman, Cayman Islands.

A shareholder holding registered shares is entitled to attend, vote and appoint one or more proxies to attend and vote instead of him. A proxy need not be a shareholder of the company.

A shareholder holding bearer shares is entitled to attend and vote. Bearer shares of these rights in respect of bearer shares will be recognized only on presentation at the Meeting of the bearer certificate or satisfactory evidence of the holding. Such evidence may be obtained by depositing the certificate with the Agent listed below against written receipt, which must be produced at the Meeting.

Copies of the Annual Report including Audited Accounts are available for inspection and may be obtained at the registered office of the Company and from the Agent listed below.

There are no service contracts in existence between the Company and any of its Directors and none are proposed.

Participating shares are listed on the London Stock Exchange and particulars of the Company are available in the Extel Statistical Service.

8th March, 1999

SECRETARY AND REGISTRAR: Julius Baer Bank and Trust Comp. Ltd., Kirk House, P.O. Box 1100, Grand Cayman, Cayman Islands

AGENT: Bank Julius Baer & Co. Ltd., Bevis Marks House, Bevis Marks, London EC3A 7NE, U.K.

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GRAND CAYMAN
A company incorporated in the Cayman Islands
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Julius Bär

PORTMAN
BUILDING SOCIETY
(Incorporated in England under the
Building Societies Act 1962)

£150,000,000

Floating Rate Notes due 1999

In accordance with the Terms and Conditions of the Notes, notice is hereby given that for the three months from 10th March 1999 to 10th June 1999 the Notes will bear interest at 5.59453% per annum.

The interest amount payable per £10,000 Note will be £140.00 and per £100,000 Note will be £1,400.00 on 10th June 1999.

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BNP move sparks fears of job losses

By Robert Graham in Paris

Unions at Paribas and Société Générale say up to 6,000 jobs are at risk if the hostile bid for the two banks by Banque Nationale de Paris were to succeed.

These estimates were made over the weekend in preparation for a meeting this morning with Daniel Bouton, the head of SocGen. The meeting, called at the request of Mr Bouton, was seen by union officials as an effort to win the support of employees to help block last week's bold BNP bid which would unravel a proposed friendly merger between Paribas and SocGen.

"Bouton realises we are his best allies," said Michel Marchet, leader of the CGT, one of the three main unions at SocGen that opposes the BNP bid.

Staff, including management, own more than 10 per cent of SocGen, the largest single block of shares. At Paribas the proportion, according to the unions, is only marginally smaller at 6 per cent. In both banks the employees have a representative on the board, although the latter's presence has carried little weight until now. Union officials say their main card in trying to block

BNP is the political sensitivity of job losses in France. Calculations made by both the leftist CGT and the more moderate CPDT point to 6,000 jobs being at risk.

Such a high level of redundancies, they insist, would not be absorbed by the accelerated rate of natural wastage expected in two years' time as the large number of personnel hired in the late 1980s and early 1990s take retirement.

The combined workforce of Paribas and SocGen in and outside France totals 60,000. The only segment considered capable of being swayed to back the alliance with BNP are staff in the various levels of management.

Paribas denied press reports that some of its staff on the management side had on Friday come out in favour of the three-way merger proposed by BNP. At BNP itself, only the union representing management has come out in favour of the offensive against Paribas-SocGen.

Unions in both the two target banks and at BNP are in close touch as they fear there could be job cuts all-round despite assurances from Michel Pébereau, head of BNP.

Ssangyong Oil merger could be in doubt

By John Burton in Seoul

A planned merger between Ssangyong Oil and SK Corp to create South Korea's biggest oil refiner appeared to be under threat yesterday after Ssangyong Oil's largest shareholder said it had not yet approved the deal.

Aramco, the Saudi oil producer that has a 35 per cent stake in Ssangyong Oil, said it would support the sale to SK Corp only "if its concerns can be satisfactorily resolved".

Although Aramco did not say what its "serious" concerns were, analysts believe it might be worried about the future of Ssangyong Oil under SK's management. Aramco supplies crude oil to Ssangyong Oil, but otherwise does not normally exercise management rights in the company.

Third-ranked Ssangyong Oil is considered Korea's best-managed oil refiner, with net profits of Won271.9bn (\$220m) on sales of Won5,970bn last year. In contrast, SK Corp reported earnings of only Won115bn despite its status as Korea's leading oil refiner with sales of Won11,000bn. The deal would also add to SK Corp's debt of Won7,900bn, more than twice its equity.

The Ssangyong group said last week it would sell its controlling 28.4 per cent stake in Ssangyong Oil to the SK group to help pay large debts. But the deal hinges on the outcome of talks on a price for the stake, estimated at \$600m.

Korea's Fair Trade Commission said it would review the sale since it would give SK Corp the ability to set domestic oil prices, with control of nearly half of the nation's oil refining industry.

The planned merger would represent further consolidation among Korean refiners, which are suffering from overcapacity, by reducing the number of competitors to three from five a year ago in a process that is benefiting Korea's largest conglomerates, or chaebol, at the expense of smaller ones.

LG Caltex has a 32 per cent market share and Hyundai Oil, which is acquiring the oil refining business of Hanwha Energy, has 20 per cent.

The disposal of Ssangyong Oil would mark another step in the dismantling of the Ssangyong group, once Korea's sixth largest chaebol. Debts amassed from an ill-fated venture into car manufacturing have forced it to sell most of the businesses, including its car, paper and financial operations.

DECISION SEEN AS SIGN ZIMMERMAN THINKS EQUITIES HAVE PEAKED

MLM co-head opts for part cash

By Jane Martinson, Investment Correspondent

Stephen Zimmerman, co-head of Merrill Lynch Mercury, is to keep half of a \$7m (\$11.43m) windfall from the sale of Mercury Asset Management, the UK's leading pension-fund manager, to Merrill Lynch of the US in cash.

The decision to invest \$3.5m in unguaranteed floating-rate notes, a cash equivalent, is disclosed in the prospectus for an investment trust launched earlier this month. The new trust offers

the loan note alternative for investors "nervous of present markets".

Mr Zimmerman's decision to keep so much money in cash is likely to be seen as a sign that he believes the world's equity markets have peaked. It comes after a number of the UK's leading fund managers have taken a bearish stance on the level of the world's stock markets in recent years.

The new trust - Mercury Asset Allocator - is designed to help former shareholders of the company gain exposure to equity markets and

defer capital gains tax liabilities.

Mr Zimmerman, one of the most senior asset managers in the UK, could have chosen to put all of his £7m in the shares of the new trust, between half and 100 per cent of which will be invested in world stock markets. Instead, half of his money will be invested this way.

However, he could also have chosen to keep all the money in loan notes guaranteed by Merrill Lynch.

Mr Zimmerman, who was deputy chairman of Mercury

when it was bought for \$3.1bn by Merrill Lynch in 1997, is believed to have received considerably more for his Mercury holding than the £7m disclosed in the prospectus.

It is unclear how the rest of this money, and any other personal wealth, is invested.

Mercury as a whole is understood not to have taken an unusually bearish stance over the past year, though it has suffered from performance problems.

The new trust has been offered to some 6,000 Mercury clients and staff who

hold about £307m of Merrill Lynch loan notes. The trust is particularly attractive to private individuals because of the capital gains tax implications.

The mandate of the new trust is to invest "actively", with big shifts in asset allocation across markets and asset types. Although it aims to provide an absolute level of return, like a hedge fund, it will not be able to go short or use leverage.

The launch closes to initial investors on March 24, after which it will be marketed more widely.

KPN chairman to step down next year

By Gordon Cramb in Amsterdam

The outlook for KPN became more uncertain over the weekend when the privatised Dutch telecommunications group said Wim Dik would step down next year after a decade as chairman.

The company made no mention of a successor, and the news may fuel expectations that KPN will at some point be put up for sale. Mr Dik, 60, has said he thinks the group will be too small

to compete in a deregulated and globalised market, while arguing that it could justify staying independent for at least five more years.

On Wednesday KPN is to report 1998 results that will show the impact of competition on its former monopoly position. The company said in January it had achieved 30 per cent growth in call volumes, but at lower prices.

It indicated that earnings growth, which would anyway be limited, would be off-

set by a F1800m (€363m, \$397m) provision for job cuts. Analysts expect net profits to fall by between a fifth and a quarter from the F12.690m for 1998.

Shares in KPN ended last week at €41.70, or 23 per cent below their peak for the past year, valuing the company, in which the Dutch government still holds a 45 per cent stake, at nearly €20bn.

KPN last year spun off TNT Post Group, the former mail and express delivery

division, into a separate listed company. The move was intended to present a clearer profile to investors as a telecoms operator. Since then, however, its shares have oscillated amid rulings by a Dutch industry regulator seeking to ensure access to the market for new rivals.

Number portability comes to the Netherlands next month, allowing customers to switch provider with less inconvenience. According to one survey, two-thirds of its

business users are considering making that step.

Growth at KPN has come recently from mobile telephony - although a British Telecommunications joint venture is among four rivals driving prices down - and from involvements abroad.

Last month Mr Dik said he wanted to move to majority control at its holdings in the Czech Republic, Slovakia and Hungary, which would allow creation of a unified eastern Europe operation.

GE chief given \$46m incentive

By Richard Waters in New York

Jack Welch, who will retire as chairman of General Electric next year, has been handed a \$46m incentive to make sure he goes out with a bang.

He was also paid one of the highest salary and bonus packages of any American chief executive last year, with a 35 per cent increase in his pay, to \$10m.

Mr Welch's 18 years at the helm of the US manufacturing and services group have already made him wealthy: his interests in GE stock, including through options, are worth about \$730m based on GE's share price, which hit a closing record of \$107½ on Friday.

They have also made many GE shareholders rich. According to the company's latest proxy statement, filed on Friday, a \$100 investment in GE when Mr Welch took over would now be worth \$4,875 - 2½ times as much as a similar investment in the

Standard & Poor's 500 index.

To make sure he has "a strong incentive" to keep adding to GE's value, the company said it had awarded Mr Welch another large lump of options and restricted stock, according to the proxy statement. Mr Welch will be allowed to cash in all of his latest award when he retires at the end of 2000.

The incentives include 300,000 units of restricted stock and options over 500,000 shares at an exercise price of \$79.25 a share. Besides his salary and bonus, the GE chairman also exercised \$46.6m worth of stock options last year.

In a report explaining the reasons for Mr Welch's high earnings, GE's compensation committee, made up of outside directors, paid tribute to his "aggressive leadership", as well as his "vision and determination" in boosting the company's stock market value by more than \$300bn during his tenure.

CONTRACTS & TENDERS

The Democratic Republic of Congo Ministry of Finance and Budget

TENDER FOR THE SELECTION OF A PRE-SHIPMENT INSPECTION COMPANY

The Government of the Democratic Republic of Congo invites sealed proposals from international reputable companies for the provision for PSI services covering imports. Interested companies will be required to submit their bid in one original and five copies to the Conseil des Adjudications du Gouvernement C/o Direction des Marchés Publics; avenue de l'Ouganda no.4204, Gombe, Kinshasa in two separate sealed envelopes:

- Envelope "A" will contain technical data to be used for pre-qualification
- Envelope "B" will contain price proposals.

Tenders must be received at the above address before 5 May 1999 at 10:00 am, when public opening will take place.

Proposals should remain valid up to 5 July 1999. They must contain a Bid bond worth US Dollars \$50,000 or its equivalent in convertible currency, established in the name of the Ministry of Finance and Budget. The Bid bond is liable to forfeiture, should the Bidder choose to withdraw his/her bid between the time of the public bids opening and the expiry of the validity period, or fail to accept and sign the contract established in terms with his/her proposal by the Ministry of Finance and Budget.

Interested Companies can obtain a copy of the Request for Proposals, through a formal request on Company stationery signed by an authorized representative, from:

Conseil des Adjudications du Gouvernement C/o Direction des Marchés Publics at the above address, upon payment of a non-refundable amount equivalent to US Dollars \$10,000, payable in Congolese Francs into the account of the Accountant; avenue des Huileries no. 4404, (Cabinet du Ministre des Postes, Téléphones et Télécommunications), Gombe, Kinshasa.

For further information please contact the Office Congolais de Contrôle, 98 Av. du Port Kinshasa/Gombe, Fax: 243-1221974.

Notice of

Annual General Meeting of Skandia

Shareholders of SKANDIA INSURANCE COMPANY LTD (publ) are hereby summoned to the Annual General Meeting on Thursday, April 8, 1999, at 3.00 p.m. (Swedish time). Location: The Congress Hall, Folkets Hus, Barnhusgatan 12-14, Stockholm, Sweden.

NOTIFICATION OF ATTENDANCE, ETC.

- Shareholders intending to attend the Annual General Meeting, must:
 - be recorded as shareholders in the Shareholders Register issued by the Swedish Securities Register Centre (Värdepapperscentralen VPC AB) as at Monday, March 29, 1999, and must
 - notify the Company of their intention to attend the Meeting not later than 4.30 p.m. (Swedish time) on Tuesday, April 6, 1999. Notification of intent to attend the Meeting should be made in writing to Skandia, Corporate Law, "AGM", SE-103 50 Stockholm, Sweden, by fax Int +46-8-788 16 80, by telephone Int +46-8-788 32 62 or via the Internet at <http://www.skandia.se/agm>. Please note that if voting by proxy, power of attorney must be sent in original and may not be sent by fax or via the Internet.

Shareholders whose shares are held in trust by a bank or private broker must temporarily register their shares in their own names in the Shareholders Register to be able to attend the Annual General Meeting. Such registration must be completed not later than Monday, March 29, 1999.

AGENDA AND PROPOSED DECISIONS

1. Opening of the Meeting
2. Election of a chairman to preside over the Meeting
Nominating Committee Recommendation: Mr. Sven Söderberg, Chairman of the Board.
3. Address by Mr. Lars-Eric Petersson, President and CEO of Skandia
4. Election of a person to check and sign the Minutes together with the Chairman
5. Verification of the voting list
6. Decision as to whether the Meeting has been properly called
7. Presentation of the Annual Accounts and the Consolidated Accounts for 1998
8. Presentation of the Auditors' Report and the Consolidated Auditors' Report for 1998
9. Approval of the Profit and Loss Account and Balance Sheet, and the Consolidated Profit and Loss Account and Consolidated Balance Sheet for 1998
10. Decision on appropriation of the Company's profit in accordance with the adopted Balance Sheet, and determination of the record date for payment of a dividend
Board recommendation: Of the amount available for distribution by the Annual General Meeting, MSEK 2,125 (the balance of MSEK 1,801 brought forward from 1997 and the year's profit of MSEK 255, reduced by an allocation to the fund for unrealized gains of MSEK 211), the Board of Directors recommends that a dividend of SEK 0.90 per share be paid, totalling MSEK 461, and that MSEK 1,664 be carried forward. The record date shall be April 13, 1999.
11. Decision as to whether to discharge the Directors and the President from liability for their administration during the 1998 financial year
Recommendation: The Company's auditors recommend that they be so discharged.
12. Decision on Directors' fees
Nominating Committee Recommendation:
 - Chairman SEK 600,000, of which SEK 225,000 shall be used to purchase issued Skandia shares, at market price, as soon as practicable after the Annual General Meeting (unchanged)
 - Vice Chairman SEK 350,000, of which SEK 130,000 shall be used to purchase issued Skandia shares, at market price, as soon as practicable after the Annual General Meeting (unchanged)
 - Director SEK 200,000, of which SEK 75,000 shall be used to purchase issued Skandia shares, at market price, as soon as practicable after the Annual General Meeting (unchanged)

The requirement concerning the purchase of Skandia shares shall not apply in respect of directors who have been appointed as policyholder representatives.

13. Proposed amendments to the Company's Articles of Association
Nominating Committee and Board Recommendation: That Article 7, paragraph 2, of the Company's Articles of Association be amended, entailing that the number of directors elected by the Annual General Meeting shall be not less than five and not more than eight. The current stipulation is that the number of elected directors shall be not less than six and not more than nine.

The complete wording of the recommended amendment to the Articles of Association will be sent to all shareholders who are directly registered as such with the Swedish Securities Register Centre. The text can also be obtained from: Skandia, Corporate Law, SE-103 50 Stockholm, Sweden, telephone Int +46-8-788 32 62, fax Int +46-8-788 16 80.

14. Decision on the number of directors to be elected by the shareholders
Nominating Committee Recommendation: A reduction from seven to five.

15. Election of directors
(The term of office, which is two years according to the Articles of Association, expires for Mr. Sven Söderberg, Mr. Bengt Braun, Mr. Kurt Augustsson and Mr. Lars-Eric Petersson.)

Nominating Committee Recommendation:

- Re-election of:
 - Mr. Bengt Braun
 - Mr. Lars-Eric Petersson.
- both for the period through the 2001 Annual General Meeting. The Swedish Consumer Agency and the Stockholm Chamber of Commerce - who have the duty to appoint the policyholders' representatives on the Skandia Board - have appointed Professor Boel Flygman (re-election) and Mr. Mikael Schyrling (new election) as the policyholders' representatives, with effect from the 1999 Annual General Meeting.

16. Decision on auditors' fees
Nominating Committee Recommendation: Compensation as agreed when procuring the services.

17. Election of auditors
Nominating Committee Recommendation: Re-election of Mr. Hans Karlsson, Authorized Public Accountant, KPMG, and new election of Mr. Jan Hingerson, Authorized Public Accountant, Ernst & Young.

18. Election of Alternate Auditors
Nominating Committee Recommendation: Re-election of Mr. Olof Cederberg, Authorized Public Accountant, Ernst & Young, and Mr. Anders Holm, Authorized Public Accountant, KPMG.

19. Election of members of the Nominating Committee for the 2001 Annual General Meeting

(According to a decision by the 1995 Annual General Meeting, the Nominating Committee shall consist of six members: three representatives of the major shareholders, one representative of the minor shareholders, one representative of the policyholders of Skandia Life Insurance Company Ltd, to be appointed by the Stockholm Chamber of Commerce, and the Chairman of the Board.)

Recommendation: Re-election of Mr. Tor Martin, Mr. Carl-Olof Ily and Mr. Ivo Vilmanen as representatives of the major shareholders (nominated by AMP Pension, Industriförbunden and the Polyala group, respectively) and Mr. Kjell Gunnarsson as representative of the minor shareholders (nominated by the Skandia Shareholders' Association). In addition, Mr. Bengt Oldmark, appointed by the Stockholm Chamber of Commerce as representative of the policyholders of Skandia Life Insurance Company Ltd, as well as Skandia's Chairman, shall be members of the Nominating Committee for the 2001 Annual General Meeting.

20. Information on the combination of Skandia's and Skandia's property & casualty insurance operations
21. Questions from shareholders
22. Adjournment of the Annual General Meeting

DIVIDEND

The Board of Directors recommends that a dividend of SEK 0.90 per share be paid to the shareholders, and that the record date for payment of the dividend shall be April 13, 1999. If this recommendation is adopted, dividends are expected to be distributed from the Swedish Securities Register Centre on April 20, 1999.

ANNUAL REPORT

The 1998 Annual Report can be obtained from: Skandia, SE-103 50 Stockholm, Sweden, telephone Int +46-8-788 10 00, fax Int +46-8-788 28 38.

INTERPRETATION OF THE PROCEEDINGS INTO ENGLISH

For the convenience of non-Swedish speaking shareholders, there will be simultaneous interpretation of the proceedings of the Annual General Meeting into English.

SWEDISH-SPEAKING SHAREHOLDERS

This summons to attend the Annual General Meeting of Skandia Insurance Company Ltd (publ), to be held on Thursday, April 8, 1999 at 3.00 p.m. in the Congress Hall, Folkets Hus, Barnhusgatan 12-14, Stockholm, Sweden, can also be obtained in Swedish. Please contact Skandia, Corporate Law, "AGM", SE-103 50 Stockholm, Sweden, telephone Int +46-8-788 32 62, fax Int +46-8-788 16 80.

A welcome is extended to the shareholders to attend the Annual General Meeting.

Stockholm, March 1999

The Board of Directors

Skandia

Classified
formation.

COMPANIES & FINANCE

LVMH ready to limit its holding in Gucci

By David Owen in Paris

Bernard Arnault, chairman of LVMH, is prepared to freeze the French luxury goods group's stake in Gucci of Italy at below 35 per cent for at least three years.

Interviewed in his Paris office ahead of a week that will bring publication of LVMH's financial results and the resumption of discussions between the two sides in an effort to resolve their legal battle, Mr Arnault said LVMH had "no intention of taking control" of the Italian fashion house.

He said LVMH was "perfectly ready to sign a standstill and to commit officially not to have more than a limited number of board members". Nor did it want to interfere with management "other than by submitting good ideas that will bring economies of scale and benefit every shareholder".

Asked whether he would not need to take control of

Gucci in the longer term to make LVMH's investment worthwhile, he indicated the French group would be content to leave its holding unchanged for three-to-five years - "and then we see".

"In the meantime we can get acquainted very well with them," he said. "We can increase the value of our investment and then we will see what happens."

Analysts expect Thursday's results presentation to show the group's net profit down about 30 per cent, due principally to its relatively high exposure to troubled Asian markets. But they also expect the company to be upbeat about prospects of recovery in the region following sales figures that appeared to signal the worst of the Asian crisis might be over.

In a move towards greater disclosure that many will attribute to the battle with Gucci, figures for the Louis Vuitton leather goods busi-

ness will for the first time be split out and not subsumed in the so-called fashion and leather goods division.

While confirming Vuitton's status as LVMH's undisputed crown jewel, this decision will probably be less flattering for the rest of the unit.

Stripping out Vuitton's 1997 ebit of FF4.21bn (€642m, \$702.6m) the rest of LVMH's fashion and leather goods portfolio appears to have contributed little to the unit's FF4.31bn operating profit.

The LVMH camp has identified more than FF400m of possible annual synergies between Vuitton and Gucci.

Mr Arnault said: "What we can bring is a lot of economy in the cost of buying things."

He was upbeat about prospects for a settlement, saying: "I think if [Gucci] is sincere in saying that they have no other objective but to stay independent, we should find an agreement."

Conditions ease for Brazil's borrowers

By John Barham in São Paulo

Brazilian corporate borrowers are beginning to feel the end of a long winter, which began last August when the Russian default and reached its nadir two months ago when the Real crashed by 40 per cent.

Banks and companies have been shut out of capital markets for over six months but say trade finance lines are returning slowly but steadily, even if access to international loans and bond markets remains limited.

Luis Mauricio Jardim, a director at Unibanco, Brazil's third biggest bank, said: "We are noticing an increase in the number of [trade] lines offered to banks. Terms and conditions are improving and there are some reductions in interest rates, although it is very early to talk about numbers."

Fernando Gomes, head of the central bank's foreign capital department, said he first began noticing an increase in requests by companies for authorisation to issue bonds three weeks ago. Brazilian companies need central bank authorisation to sell bonds or raise loans overseas. However, he said "the values are still small".

Inability to access international capital markets is hurting Brazilian borrowers, which are facing stiff amortisation schedules. They had to make \$1.85bn in service payments last month and must pay a further \$3.83bn in principal and interest on medium and long-term loans in March and April.

All but a few companies have had to pay these loans down or refinance them at scorchingly high rates on local short-term capital markets. The benchmark interest rate now stands at 45 per cent. Fortunately, repayment schedules ease considerably after June.

Mr Jardim said markets for corporate and bank loans remain closed but spreads on Brazilian bonds in secondary markets have narrowed. He said: "You are starting to see some scarcity. You are getting some private banks and investors trying to buy. When this happens and interest rates fall, you get room for new issues."

Private borrowers are waiting for the government to issue an international bond that would act as a reference point enabling international banks to resume lending to Brazilian companies and banks.

Mol chief in growth pledge

By Kester Eddy in Budapest

Hungarian oil and gas company Mol intends to become the strongest energy player in the eastern European region, Janos Csak, the newly appointed chairman pledged last Friday.

While concentrating on the traditional core oil and gas sector, Mol will also target electricity and chemicals projects in both domestic and neighbouring markets. "We want to make sure Mol has the controlling positions in the value chain. Anybody who comes into the energy sector in the region will first have to think of Mol, even if they have deep pockets," Mr Csak said.

Mol has exclusive rights to the import and wholesale gas market in Hungary, and dominates the retail petrol market, with 370 out of 900 branded stations. It is also expanding its 50-strong service station chain in Romania, Slovakia, Croatia and Ukraine.

Mol had up to four years to prepare for the increased competition in the liberalised markets coming with European Union membership, Mr Csak said.

NEWS DIGEST

ACQUISITIONS

Japan Tobacco plans to accelerate diversification

Japan Tobacco will accelerate its diversification plans despite its \$8bn acquisition of the international cigarettes business of RJR Nabisco. Yasushi Shingai, a senior executive, said he was confident the group had not overpaid for RJR International, and that it would reap \$300m in post-tax synergy savings after five years.

Speaking in New York, Mr Shingai said future diversification would concentrate on pharmaceuticals and food. Less than 2 per cent of the group's total sales currently come from non-tobacco areas. Its pharmaceutical business has licensing partnerships with drug companies including Johnson & Johnson and Pharmacia & Upjohn. Food operations include Burger King restaurants in Tokyo, Green Giant processed foods in Japan, and soft drinks.

Mr Shingai, general manager, corporate planning division, would not give details of the company's debt structure after the RJR International acquisition, which is being financed by Citibank. However, the group had \$5.4bn in cash and short-term investments at the end of last year, and would reduce its cost of capital by taking on debt.

Analysts had said a buyer with a broader international presence would have been able to find more synergy benefits but Mr Shingai said: "We can rejuvenate these brands because of the cashflow from our domestic operations."

Andrew Edgecliffe-Johnson, New York

OIL

Sasol, Petronas to co-operate

Sasol, the South African petrochemical and synthetic fuel producer, and Petronas, the Malaysian state oil group, are considering the establishment of a joint oil company and will explore other forms of co-operation.

Last year, Petronas bought control of Engen, South Africa's biggest fuel retailer. The proposed new company is likely to be based on a tie-up between Sasol's synthetic fuel plants and Engen's retail network. They may also co-operate on petrochemicals and oil and gas exploration.

Sasol, whose oil-from-coal plants date back to the apartheid era and attempts by the government to circumvent an oil embargo - said in December it was terminating the old agreements following companies such as Engen, Shell and Total to buy Sasol fuel and have Sasol pumps on their petrol station forecourts. Sasol's subsidies are being phased out. Victor Mallet, Johannesburg

AUTOMOTIVE PARTS

Federal-Mogul stock slumps

Shares in Federal-Mogul, one of the most acquisitive players in the wave of consolidation in the automotive parts sector, slumped by about 11 per cent on Friday, as several analysts reduced earnings forecasts. The blame for the fall was attributed mainly to the impact of a Merrill Lynch note, which lowered the firm's rating from "accumulate" to "buy", and talked of sales running behind projected levels, partly because of the weak European after-market. The first quarter earnings estimate was cut from 95 to 92 cents. Another research firm also cut its estimate to 90 cents a share.

The Michigan-based company has tripled its annual sales through a number of large acquisitions over the past 18 months, including Britain's T&N group, Chicago-based Fel-Pro and the automotive arm of Cooper Industries. But it recently missed out in the bidding for LucasVarity in the UK, with TRW, another US company, emerging as the successful buyer. However, while the acquisition strategy has increased Federal-Mogul's market position and sales, it has also meant a more leveraged balance sheet, with a large amount of new equity having already been issued.

Niklaid Tait, Chicago

PAY TELEVISION

MIH to list in Amsterdam

MIH Holdings, the South African provider of pay television services, is to bring a minority stake in its operations to the Amsterdam stock exchange next month, in the latest move by a Johannesburg listed company to seek a quotation abroad. It filed documents last week with the US Securities and Exchange Commission to offer shares in MIH Limited, a British Virgin Islands subsidiary which conducts most of its activities. These include supplying a TV signal to nearly 1.9m households, mainly in Africa but also in markets including Greece and Thailand.

According to the SEC filing, the company had revenues in its latest six months to last September of \$286.3m, on which it made a net loss of \$32.2m. The offering follows strong demand for an issue launched in Amsterdam this year by United Pan-European Communications, a cable TV provider, which, like many in the industry, has never made a profit. Gordon Cramb, Amsterdam

SOFTWARE

Oracle shares down a fifth

Shares in Oracle, the software company, fell by more than a fifth on Friday as the market reacted to lower than expected third-quarter revenues. Although the company exceeded Wall Street profits forecasts with earnings of 20 cents a share, revenue growth was lower than expected, rising by 19 per cent to \$2bn. Revenues from the services business rose 29 per cent to \$1.2bn, but sales of software were sluggish, with a 7 per cent year on year improvement to \$600m.

Analysts responded by cutting buy recommendations. The news caused the shares to drop \$9.4, or 23 per cent, to \$28.2. Oracle shares have been remarkably volatile over the past two years as the company has fought to overcome slowing sales of its database software with expansion into new areas, such as financial applications and services.

Worries about slowing growth depressed the share price for most of 1998, but the launch of several new products last autumn prompted a rally that lifted the share price from \$15 to more than \$40.

Roger Taylor, San Francisco

AIRLINES

Taiwan carrier sees profit

China Airlines, Taiwan's major carrier, expects to return to profitability this year after painful losses in 1998. Philip Wei, director of the airline's finance division, said results for last year were still being audited, but that the airline expected a net loss of slightly less than T\$2.85bn (US\$366m).

China Airlines' ticket sales plunged after a crash in February 1998 that killed 202 people and a slump in travel caused by Asia's financial crisis. Executives of the company, which is majority-owned by a government-controlled foundation, said that in recent months they had improved safety and made progress in regaining passengers' trust. Mr Wei declined to give details of the expected profits for 1999, but said they would at least exceed US\$22m.

More Dickie, Taipei

European Investment Bank

Notice to Noteholders

EUROPEAN INVESTMENT BANK

LUF 2,000,000,000

5.25 per cent. EURO-Fungible Notes due 15 April, 2004

(the "Note Issue")

ISIN XS0081314907

Notice of redemption (conversion, renouveau and reconversion) and consolidation is hereby given in accordance with the terms and conditions ("Conditions") of the Note Issue, so that with effect from 15 April, 1999

Conversion

1 each Note of LUF 20,000,000 shall be deemed to be converted into EURO 1,000,000.

Interest Payment

2 an amount of EURO 60.84 shall be paid on 15 April, 1999 to the holder in respect of each Note of LUF 20,000,000.

Cash Settlement

3 in addition to the payment of interest, an amount of EURO 3.47 shall be paid on 15 April, 1999 to the holder in respect of each Note of LUF 20,000,000 so that, for each such Note, the amount of each EURO-denominated Note (the "Original Note") shall be EURO 1,000,000.

Renouveau

4 the new denominations of the Notes (the "New Notes") shall be EURO 4, EURO 10,000, EURO 100,000 and EURO 1,000,000 and the total amount of the Note Issue shall be of a maximum amount of EURO 40,000,000,000.

Business Days

5 any reference to business days in the Conditions shall be deemed to refer to a day on which the Trans-European Automated Real-time Gross Settlement Express Transfer system ("TARGET") is open.

Consolidation

6 the Note Issue shall be consolidated with note issues 5.25 per cent. EURO-Fungible Notes due 15 April, 2004, ISIN XS0081314907, XS0081314908, XS0081314909 and XS0081314910 (the "Other Issues") and together with the Note Issue the "Consolidated Issue" which shall also be consolidated on 15 April, 1999.

Nominal amount of Consolidated Issue

7 the aggregate nominal amount of the Consolidated Issue shall be of a maximum amount of EURO 4,141,400,716.

8 the EIB shall issue replacement Global Notes for the Consolidated Issue in exchange for the Global Note of the Note Issue and the Other Issues.

ISIN number

9 the ISIN number for the Consolidated Issue shall be XS0081314907.

Note Depository

10 to the extent the Notes are held in Cedebank or Morgan Guaranty Trust Company of New York, Brussels Office, as operator of the Euroclear System, the common depository shall be Paribas Luxembourg; to the extent the Notes are held in Deutsche Börse Clearing, the depository shall be Deutsche Börse Clearing.

Stock Exchange Listing

11 the Consolidated Issue shall be listed on the Luxembourg Stock Exchange, without prejudice to a listing on one or more other Stock Exchanges in the European Community.

Cleaver

12 the Consolidated Issue shall be cleared through Cedebank, Morgan Guaranty Trust Company of New York, Brussels Office, as operator of the Euroclear System and Deutsche Börse Clearing. Notwithstanding, the depository shall be Paribas Luxembourg; to the extent the Notes are held in Deutsche Börse Clearing, the depository shall be Deutsche Börse Clearing.

Copies of the Conditions are available for inspection at the office of the Fiscal Agent at

Paribas Luxembourg
10a Boulevard Royal
L-2520 Luxembourg

Dated 15 March, 1999

European Investment Bank

Notice to Noteholders

EUROPEAN INVESTMENT BANK

DEM 1,395,897,000

5.25 per cent. EURO-Fungible Notes due 15 April, 2004

(the "Note Issue")

ISIN XS0081314907

Notice of redemption (conversion, renouveau and reconversion) and consolidation is hereby given in accordance with the terms and conditions ("Conditions") of the Note Issue, so that with effect from 15 April, 1999

Conversion

1 each Note of DEM 1,000,000 shall be deemed to be converted into EURO 1,000,000.

Interest Payment

2 an amount of EURO 25.94 shall be paid on 15 April, 1999 to the holder in respect of each Note of DEM 1,000,000.

Cash Settlement

3 in addition to the payment of interest, an amount of EURO 1.22 shall be paid on 15 April, 1999 to the holder in respect of each Note of DEM 1,000,000 so that, for each such Note, the amount of each EURO-denominated Note (the "Original Note") shall be EURO 1,000,000.

Renouveau

4 the new denominations of the Notes (the "New Notes") shall be EURO 4, EURO 10,000, EURO 100,000 and EURO 1,000,000 and the total amount of the Note Issue shall be of a maximum amount of EURO 10,000,000,000.

Business Days

5 any reference to business days in the Conditions shall be deemed to refer to a day on which the Trans-European Automated Real-time Gross Settlement Express Transfer system ("TARGET") is open.

Consolidation

6 the Note Issue shall be consolidated with note issues 5.25 per cent. EURO-Fungible Notes due 15 April, 2004, ISIN XS0081314907, XS0081314908, XS0081314909 and XS0081314910 (the "Other Issues") and together with the Note Issue the "Consolidated Issue" which shall also be consolidated on 15 April, 1999.

Nominal amount of Consolidated Issue

7 the aggregate nominal amount of the Consolidated Issue shall be of a maximum amount of EURO 3,141,400,716.

8 the EIB shall issue replacement Global Notes for the Consolidated Issue in exchange for the Global Note of the Note Issue and the Other Issues.

ISIN number

9 the ISIN number for the Consolidated Issue shall be XS0081314907.

Note Depository

10 to the extent the Notes are held in Cedebank or Morgan Guaranty Trust Company of New York, Brussels Office, as operator of the Euroclear System, the common depository shall be Paribas Luxembourg; to the extent the Notes are held in Deutsche Börse Clearing, the depository shall be Deutsche Börse Clearing.

Stock Exchange Listing

11 the Consolidated Issue shall be listed on the Luxembourg Stock Exchange, without prejudice to a listing on one or more other Stock Exchanges in the European Community.

Cleaver

12 the Consolidated Issue shall be cleared through Cedebank, Morgan Guaranty Trust Company of New York, Brussels Office, as operator of the Euroclear System and Deutsche Börse Clearing. Notwithstanding, the depository shall be Paribas Luxembourg; to the extent the Notes are held in Deutsche Börse Clearing, the depository shall be Deutsche Börse Clearing.

Copies of the Conditions are available for inspection at the office of the Fiscal Agent at

Paribas Luxembourg
10a Boulevard Royal
L-2520 Luxembourg

Dated 15 March, 1999

European Investment Bank

Notice to Noteholders

EUROPEAN INVESTMENT BANK

ITL 750,000,000,000

Differentiated Coupon EURO-Fungible Notes due 15 April, 2004

(the "Note Issue")

ISIN XS0081314907

Notice of redemption (conversion, renouveau and reconversion) and consolidation is hereby given in accordance with the terms and conditions ("Conditions") of the Note Issue, so that with effect from 15 April, 1999

Conversion

1 each Note of ITL 5,000,000,000 shall be deemed to be converted into EURO 2,500,000,000.

Interest Payment

2 an amount of EURO 61.50 shall be paid on 15 April, 1999 to the holder in respect of each Note of ITL 5,000,000,000.

Cash Settlement

3 in addition to the payment of interest, an amount of EURO 2.25 shall be paid on 15 April, 1999 to the holder in respect of each Note of ITL 5,000,000,000 so that, for each such Note, the amount of each EURO-denominated Note (the "Original Note") shall be EURO 2,500,000,000.

Renouveau

4 the new denominations of the Notes (the "New Notes") shall be EURO 4, EURO 10,000, EURO 100,000 and EURO 1,000,000 and the total amount of the Note Issue shall be of a maximum amount of EURO 40,000,000,000.

Business Days

5 any reference to business days in the Conditions shall be deemed to refer to a day on which the Trans-European Automated Real-time Gross Settlement Express Transfer system ("TARGET") is open.

Consolidation

6 the Note Issue shall be consolidated with note issues 5.25 per cent. EURO-Fungible Notes due 15 April, 2004, ISIN XS0081314907, XS0081314908, XS0081314909 and XS0081314910 (the "Other Issues") and together with the Note Issue the "Consolidated Issue" which shall also be consolidated on 15 April, 1999.

Nominal amount of Consolidated Issue

7 the aggregate nominal amount of the Consolidated Issue shall be of a maximum amount of EURO 3,141,400,716.

8 the EIB shall issue replacement Global Notes for the Consolidated Issue in exchange for the Global Note of the Note Issue and the Other Issues.

ISIN number

9 the ISIN number for the Consolidated Issue shall be XS0081314907.

Note Depository

10 to the extent the Notes are held in Cedebank or Morgan Guaranty Trust Company of New York, Brussels Office, as operator of the Euroclear System, the common depository shall be Paribas Luxembourg; to the extent the Notes are held in Deutsche Börse Clearing, the depository shall be Deutsche Börse Clearing.

Stock Exchange Listing

11 the Consolidated Issue shall be listed on the Luxembourg Stock Exchange, without prejudice to a listing on one or more other Stock Exchanges in the European Community.

Cleaver

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Paribas Luxembourg
10a Boulevard Royal
L-2520 Luxembourg

Dated 15 March, 1999

BIDDER/INVESTOR	TARGET	SECTOR	VALUE	COMMENT
Japan Tobacco (Japan)	Unit of RJR Nabisco (US)	Tobacco	\$8bn	Shock sell-off
GFT Group (US)	Newcourt Credit (Canada)	Financial svcs	\$4.5bn	Stock swap
Fortis (Belgium)	American Bankers Ins (US)	Insurance	\$2.6bn	Seeking synergies
Reliant Energy (US)	UNA (Netherlands)	Power	\$2.4bn	Trailblazer
Ahold (Netherlands)	Pathmark Stores (US)	Retailing	\$1.75bn	Building presence
Philips Electronics (Netherlands)	VLSI Technology (US)	Semiconductors	\$777m	Rare aggregation
Albemarle (US)	Albright & Wilson (UK)	Chemicals	\$665m	Agreed cash offer
BMC Software (US)	New Dimension (Israel)	Computer svcs	\$650m	Top-tier gambit
IVG (Germany)	Asitcus (Sweden)	Property	\$446m	Pan-European
Pensieve (France)	Servair (UK)	Contract svcs	\$163m	Trump's Army

European Investment Bank

Notice to Noteholders

EUROPEAN INVESTMENT BANK

ITL 960,940,000,000

5.25 per cent. EURO-Fungible Notes due 15 April, 2004

(the "Note Issue")

ISIN XS0081314907

Notice of redemption (conversion, renouveau and reconversion) and consolidation is hereby given in accordance with the terms and conditions ("Conditions") of the Note Issue, so that with effect from 15 April, 1999

Conversion

1 each Note of ITL 5,000,000,000 shall be deemed to be converted into EURO 2,500,000,000.

Interest Payment

2 an amount of EURO 61.50 shall be paid on 15 April, 1999 to the holder in respect of each Note of ITL 5,000,000,000.

Cash Settlement

3 in addition to the payment of interest, an amount of EURO 2.25 shall be paid on 15 April, 1999 to the holder in respect of each Note of ITL 5,000,000,000 so that, for each such Note, the amount of each EURO-denominated Note (the "Original Note") shall be EURO 2,500,000,000.

Renouveau

4 the new denominations of the Notes (the "New Notes") shall be EURO 4, EURO 10,000, EURO 100,000 and EURO 1,000,000 and the total amount of the Note Issue shall be of a maximum amount of EURO 40,000,000,000.

Business Days

5 any reference to business days in the Conditions shall be deemed to refer to a day on which the Trans-European Automated Real-time Gross Settlement Express Transfer system ("TARGET") is open.

Consolidation

6 the Note Issue shall be consolidated with note issues 5.25 per cent. EURO-Fungible Notes due 15 April, 2004, ISIN XS0081314907, XS0081314908, XS0081314909 and XS0081314910 (the "Other Issues") and together with the Note Issue the "Consolidated Issue" which shall also be consolidated on 15 April, 1999.

Nominal amount of Consolidated Issue

7 the aggregate nominal amount of the Consolidated Issue shall be of a maximum amount of EURO 3,141,400,716.

8 the EIB shall issue replacement Global Notes for the Consolidated Issue in exchange for the Global Note of the Note Issue and the Other Issues.

ISIN number

9 the ISIN number for the Consolidated Issue shall be XS0081314907.

Note Depository

10 to the extent the Notes are held in Cedebank or Morgan Guaranty Trust Company of New York, Brussels Office, as operator of the Euroclear System, the common depository shall be Paribas Luxembourg; to the extent the Notes are held in Deutsche Börse Clearing, the depository shall be Deutsche Börse Clearing.

Stock Exchange Listing

11 the Consolidated Issue shall be listed on the Luxembourg Stock Exchange, without prejudice to a listing on one or more other Stock Exchanges in the European Community.

Cleaver

12 the Consolidated Issue shall be cleared through Cedebank, Morgan Guaranty Trust Company of New York, Brussels Office, as operator of the Euroclear System and Deutsche Börse Clearing. Notwithstanding, the depository shall be Paribas Luxembourg; to the extent the Notes are held in Deutsche Börse Clearing, the depository shall be Deutsche Börse Clearing.

Copies of the Conditions are available for inspection at the office of the Fiscal Agent at

Paribas Luxembourg
10a Boulevard Royal
L-2520 Luxembourg

Dated 15 March, 1999

Chapman & Co

COMPANIES & FINANCE

OIL MOVE TO CUT OUTPUT UNDERPINS RISE

Market waits to see if price rally holds

By Robert Corzine

Oil companies and traders will be eagerly awaiting evidence this week as to whether the latest attempt by the world's leading petroleum exporters will succeed in pushing prices back to the \$15-\$21 a barrel range in which they have spent much of the past decade.

Last Friday members of the Organisation of Petroleum Exporting Countries and important non-Opec producers such as Mexico announced that they would cut production by more than 2m barrels a day from next month.

The cut is to be in addition to last year's output reductions, the effectiveness of which have been undermined by patchy Opec compliance - only 77 per cent in February, according to the International Energy Agency - weak demand, a mild winter in much of the US and Europe, and a surge in Iraqi exports under the oil for food programme.

The widespread expectation that Opec would be forced to act again underpinned the recent rally in oil futures prices and oil company shares over the past few weeks.

The price of the benchmark Brent Blend futures contract in London rose from \$10.88 a barrel two weeks ago to close at \$12.58 last Friday but even with the latest output agreement oil prices are still below last year's depressed average of about \$13.30 for Brent.

Last week some Opec oil ministers voiced optimism that prices would quickly rebound as the cuts ate into the global crude surplus that was one of the main causes of last year's price collapse. A few even predicted that oil prices would be back to the high teens by year-end.

The likelihood of that happening depends on a number of factors. The first, as with all commodity restraint agreements, is compliance. Opec officials insist this time will be different but much depends on which countries cut the most.

In the market's eyes Saudi

Arabia, Kuwait and the United Arab Emirates are the most credible, but Saudi Arabia, the world's biggest oil producer and exporter, is ever wary of being cast in the role of swing producer, a position it assumed in the crude price collapse of 1986 and one it has vowed never to take on again.

Iraq has demanded that Saudi Arabia, which has largely made up for lost Iraqi output since the invasion of Kuwait, shoulder the bulk of the cuts.

The parlous state of many Opec economies and the involvement in the agreement of many heads of state suggests compliance might improve. The optimistic case is also reinforced by the decline this year of high cost non-Opec output, especially onshore in the US, and a slowdown in new developments undertaken by private western oil companies.

Analysts say another positive factor is that Iraqi production is probably at or near the maximum possible without new investment.

The attitude of some western oil companies also seems to have changed. Last year, most pushed for volume growth to offset declining prices. This year, the emphasis seems to be on margins.

BP Amoco, which in recent years has boasted of its ability to push up volumes, last month said there would be no volume growth this year.

A quick rebound in oil prices is no doubt the outcome that worried Opec finance ministers are seeking. But a rapid rise could encourage cheating by countries keen to boost cash flows. It would also slow or even stop the erosion of non-Opec output.

Some analysts argue that a rapid price rise is not guaranteed, even if the latest agreement erodes the surplus and helps bring the global oil supply equation back into balance, as it would do at a time of continuing uncertainty about the global economy, the ultimate source of oil demand.

And, as Opec oil officials know only too well, balanced markets do not rise.

AT&T may shift to multiple suppliers

By Scott Morrison in Toronto

The recent announcement that AT&T was evaluating new technology developed by Nortel Networks, the Canadian communications networking company, signalled that the US carrier was looking for alternate equipment suppliers.

AT&T had long depended on Lucent, the company it spun off in 1996, to meet its core equipment requirements but analysts said AT&T appeared ready to adopt an open network architecture, which would enable it to purchase equipment for any number of suppliers, joining an industry trend that is reshaping relationships between manufacturers and carriers.

While it is more difficult to manage multiple supplier networks, carriers have been increasingly willing to make that concession in order to

ensure they can purchase the most appropriate technology at the best price.

Analysts expect the trend to multiple vendor relationships to accelerate as the industry adopts new technology to respond to the big increase in data traffic.

Large incumbents such as AT&T and the Baby Bells are moving quickly to build "converged" networks capable of carrying voice, data and video in order to compete with alternate carriers that have recently built their own cutting edge networks.

The new technology required by incumbent carriers has given equipment makers such as Nortel new opportunities to establish relationships that had eluded them in the past.

First to market with new technology, as well as performance and price, will determine who wins supply contracts.

Croatian telecoms sell-off to begin

By Kevin Dore, East Europe Correspondent

Croatia is aiming to complete the first part of the privatisation of its telecommunications utility during the third quarter this year in the flagship deal of the belated programme to sell key state assets.

The government has appointed Dresdner Kleinwort Benson, the investment banking division of Dresdner Bank of Germany, as the lead adviser for the deal which is expected to value Croatia Telecom (HT) at more than \$2.5bn.

In the first stage the government is seeking to sell a minority stake of 26 per cent in HT to a strategic investor. This is expected to be followed by an initial public offering to international and domestic investors in 2000.

The sale is a crucial ele-

ment in the government's strategy to increase the flow of privatisation revenues to help balance the state budget this year. Late last month it raised \$300m (\$328m) in its debut euro-denominated international bond issue.

Croatia is also seeking to sell substantial stakes in three state-owned banks later this year. It has appointed ABN Amro, the Dutch bank, as the adviser for the privatisation of Privredna Banka, the second largest Croatian bank, while Daiwa Europe will advise on the sale of Splitska Banka with HSBC and Deloitte & Touche working on the disposal of Rijeka Banka.

The government has also announced its intention to privatise INA, the state-owned oil and gas group, although the timing of this sell-off is still unclear.

Victoria moves on with power disposals

By Gwen Robinson in Sydney

Australia's Victoria state has announced sales of its remaining natural gas utilities worth nearly A\$5bn (\$3.18bn) as part of its privatisation programme.

On Sunday, it said it would sell Stratus Networks and Energy 21, the third and final component of its natural gas distribution network, for A\$1.67bn to an Australian consortium led by Boral Energy and Envestra.

On Saturday, it said it would sell Multinet Gas/Knox Energy for A\$1.97bn to a consortium led by United Inc, a US-based energy company, and AMP, Australia's largest insurance and financial services group.

In January, the state government sold Westar/Kinetik Energy for A\$1.83bn to US-based Texas Utilities Co. Sunday's sale brings to \$28.1bn the proceeds from Victoria's energy privatisation programme since it launched electricity reforms in 1995.

Alan Stockdale, state treasurer, said the state's last remaining electricity generating assets, Ecogen gas-fired electricity stations at Newport and Jerralangi, would be sold by the end of March. The sale of the remaining gas asset, Transmission Pipelines Australia, would probably be completed in late April.

SYNDICATED LOANS THE OLIVETTI AND TELECOM ITALIA BATTLE IS PROVING TO BE A TEST FOR BANKERS

Jumbo transactions come of age

By Vincent Boland

For a brief moment last week during the hectic takeover battle between Olivetti and Telecom Italia, it looked like the world was about to run out of euros. Plans by both companies to raise jumbo syndicated loans - one to pursue the hostile bid, the other to help see it off - were set to provide an early test of how deep the euro-denominated capital markets really were.

They are, in fact, very deep indeed, regardless of the scepticism surrounding Olivetti's chances of securing Telecom Italia. And they need to be, given the scale of the financing being sought by both companies.

Olivetti is seeking to raise €2.5bn (\$2.4bn) while Telecom Italia wants €1.6bn (initial speculation that it might want €3.0bn was considerably wider of the mark). If Olivetti's bid fails, it will be because investors are not convinced the new company will work, not because there is insufficient capital to finance its creation.

Bankers agree, however, that whatever the outcome, the role of the syndicated loan market for jumbo transactions has been transformed. Some predict that it will outlast the international bond market as the primary source of funding for large merger and acquisition financing as European corporate restructuring gathers pace after the arrival of the euro.

Apart from the Olivetti and Telecom Italia loans, easily the largest to date in euros, the market is absorbing a \$10bn to \$14bn facility for Vodafone, the UK telecommunications group, which is taking over AirTouch of the US. Price talk in the market for that jumbo loan is for a margin of 65 to 75 basis points over Libor.

'The key question for banks is whether they are comfortable with the credit'

Meanwhile, bankers are expecting Mannesmann, the German telecoms group, to tap the market for up to DM15bn (£7.7bn, \$8.5bn) to allow it to acquire Omnitel and Infostrada from Olivetti if the latter succeeds in winning Telecom Italia.

"The syndicated loan market has now been recognised as the main source of financing corporate acquisitions. That is a very interesting shift," says a senior syndicate banker at a London-based lender. "I see it playing that role on an ongoing basis."

The syndicated loan market certainly seems now to meet the criteria to fulfil the role and establish a new niche away from its core activity in financing infra-

structure projects and corporate transactions. First, although there is disagreement about whether the loan route is cheaper for borrowers than that of the bond market, bankers say it is much more flexible, allowing banks to negotiate with each other rather than pitch to a wide range of investors.

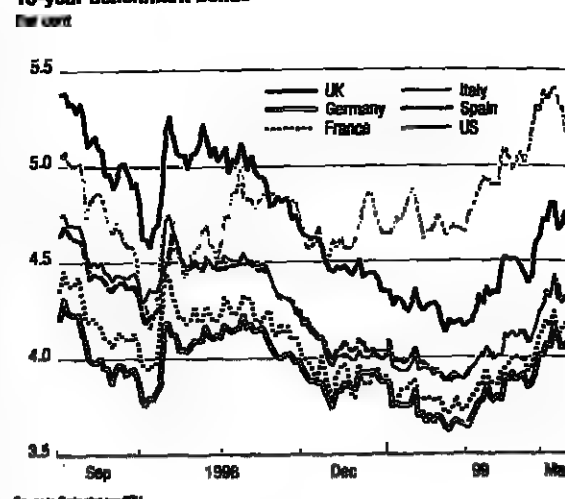
Second, raising financing in the syndicated loan market cements the relationship between a client and its bankers. In the case of Olivetti and Telecom Italia, bankers say a crucial element in their success in the market will be their ability to leverage their relationships with the international banks on whose support they are counting.

Telecom Italia's canny move into the syndicated loan market at the same time as Olivetti has caused some banks to think twice before committing to either of them, in order to assess their relationships with both parties to the takeover bid.

Given the plethora of banking advisers to both sides, some of the biggest banks in the syndicated loan market are "conflicted", according to market observers. This is the case even though neither Olivetti nor Telecom Italia is believed to have demanded "exclusivity" - whereby a bank committing to one syndicate could not participate in the other.

A third reason why the syndicated loan market has acquired new depth is the

10-year benchmark bonds



arrival in the sector in recent years of the big US investment banks.

These banks not only provide advice on mergers and acquisitions but also the means of financing them. Bankers say Goldman Sachs, Merrill Lynch and Morgan Stanley Dean Witter have become as important as commercial banks in the loan market - a good example of the "one-stop shopping" strategy they have adopted in recent years.

The growing importance of the syndicated loan market has valuable lessons for borrowers too, bankers say. Apart from their banking relationships, their credit history will be key to their success in raising capital.

Olivetti is paying 225 basis

points over Libor for its €2.5bn loan, widely seen as expensive for the borrower but necessary in order to assure a strong syndicate.

As one US banker noted: "The key question for banks is whether they are comfortable with the credit. It doesn't matter what the margin is if you don't think you will be repaid."

That means that margins are likely to continue widening from levels seen in the past two years, when they had often fallen to 20 basis points over Libor.

If predictions about the scale of European industrial restructuring and cross-border acquisitions are borne out, the jumbo syndicated loan market seems the most obvious winner.

PINAULT PRINTEMPS-REDOUTE

Strong improvement in results

Number 1 in Europe in specialized distribution, the Group has leading positions in its four divisions:

- Le Printemps, Conforama, Redcats and Fnac in retail
- Finaref in credit and financial services
- Rexel, Pinault Bois & Matériaux and Guilbert in business to business
- CFAO in international trade

Determined to be an international player, the Group's major objective is to strengthen both the growth and profitability of each one of its subsidiaries.

Pinault-Printemps-Redoute, whose role is to be at the service of its customers, has three principle values: entrepreneurial spirit, reactivity and innovation.

The Supervisory Board of Pinault-Printemps-Redoute, chaired by Ambroise Roux, met March 10, 1999 and approved the Group's audited parent company and consolidated results as at December 31, 1998, as presented by the Management Board.

Consolidated figures	In € millions	Change	In FF millions
	1998	1997	1998 - 1997
Revenues	25,987	13,595.2	+21.5 %
Operating income	3,973	655.1	+39.1 %
Net income before goodwill amort.	3,400	437.7	+28.3 %
Net income	3,000	400.5	+26.7 %
Diluted Earnings per share (EPS)	4.33	3.56	+21.1 %
Proposed Dividend (EPS)	1.99	1.19	+31.1 %
Capital	2,000	601.4	+33.3 %
Capital expenditure	2,000	251.1	+37.9 %
Shareholders' Equity	3,000	3,040.4	+22.0 %
Net debt	3,000	2,113.8	+43.8 %

* published 1997 net income, excluding the impact of non-recurring elements resulting from the sale of Prisunic. After non-recurring elements, 1997 net income was € 434.9 m (FF 2,853 m).

Sustained organic growth

Sales increased by 21.5%. On a comparable structure and exchange rate basis, 1998 sales rose by 5.9%. This organic growth is due to an increase of:

- + 6.6 % in the retail division
- + 4.7 % in the business to business division
- + 8.2 % in the international trade division

Significant international expansion

In 1998, international sales grew by 51.8%, rising to 44.2% of Group sales (35.4% in 1997). This growth reflects the acquisition of Brylcre (the fourth largest mail-order company in the USA) and Guilbert (European leader in the distribution of office supplies and furniture). In addition, internationalization of the Conforama and Fnac activities through the opening of stores in Spain and Portugal, and further acquisitions for Rexel aimed at strengthening its worldwide presence (Australia and New Zealand) have significantly boosted the share of international sales.

Further increase in profitability

Consolidated operating income rose by 39.1%, amounting to € 3,973 m (FF 5,977 m). An improvement in the gross margin and strict cost management have enabled an increase in the operating margin in all divisions. The operating margin increased by 0.7 point to 5.5 %, compared with 4.8 % in 1997.

Net financial costs were € 63.3 m (FF 415 m), compared with € 24.7 m (FF 162 m) in 1997. This reflects the major acquisitions completed during the year. The fall in interest rates somewhat offset this effect.

The share in earnings from equity affiliates amounted to € 126.7 m (FF 831 m). The contribution from the Financial Services division rose by 24.8 % against 1997 to € 119.7 m (FF 785 m). Average outstanding loans and new loan production for the division increased by 11.3% and 13.3% respectively.

Minority interests totaled € 97.6 m (FF 640 m). The € 42.2 m (FF 277 m) increase is largely due to minority interests in Guilbert and Brylcre.

Group share of net income before goodwill amortization reached € 565.9 m (FF 3,712 m), up 29.3% compared with 1997 recurring income.

Thus, after goodwill amortization, Group share of net income amounted to € 507.8 m (FF 3,331 m) up 26.7% compared with 1997 recurring net income.

Diluted earnings per share progressed by 21.1 % as a result of the dilution from the 1998 capital increase to remunerate the acquisition of Guilbert shares.

Financial structure

Cash flow increased by 32.3% to € 795.9 m (FF 5,221 m). Combined with the improvement in working capital, it largely covers capital expenditure in 1998 which totaled € 346.4 m (FF 2,272 m), up 37.9%. Thus, free operating cash flow generated during the year amounted to € 476.7 m (FF 3,127 m).

Net financial investments amounted to € 808.7 m (FF 5,305 m).

Net debt rose from € 2,113.8 m (FF 13,866 m) to € 3,081.9 m (FF 20,216 m) and the debt to equity ratio rose from 0.69 at year end 1997 to 0.83.

Dividend up 21.1 %

In 1998, parent company earnings reached FF 873 m against FF 630 m in 1997. Net income totaled FF 1,555 m.

At the Annual General Meeting on 27 May 1999, the Supervisory Board will recommend the distribution of a dividend of 9.45 francs (1.44 euros) per share, combined with a tax credit of 50% for individual shareholders. Subject to approval from the AGM, this dividend will be paid on July 1, 1999.

Outlook 1999

Since the beginning of the year, the favorable 4th quarter trends in the retail division have continued. In the business to business division, the trend remains positive. At end February, including the integration of Brylcre, Group revenues were up 11.3 %.

In 1999, the Group will pursue a sustained development programme by organic growth (in particular with the opening of 100,000 sqm or + 12 % of new sales area) and by acquisitions.

Rexel acquired five companies in February 1999, generating combined annualised revenues of 85.4 M€ (560 MF), thereby strengthening its positions in Europe and in connectors and industrial automates.

An agreement has been signed with the independent directors of Brylcre permitting the purchase of the outstanding shares at a price of \$ 24.5, for a maximum amount of \$ 211 million.

COMPANIES & FINANCE

Dow Corning may be near deal on implants

By Andrew Edgecliffe-Johnson

Dow Corning will today take an important step towards the final resolution of its long-running legal battles against women with breast implant claims.

The company will post details of its proposed \$3.2bn settlement to 176,000 women. In what it hopes will be the penultimate milestone on its road back from Chapter 11 bankruptcy protection.

The recipients, 138,000 of whom are in the US, will be sent ballot slips and will have 60 days to vote on the proposal.

On June 28, a confirmation hearing is expected to begin before the Bankruptcy Court. If successful, this could allow Dow Corning to emerge from Chapter 11 in

July, after four years, and to resume payments of dividends to its two shareholders.

Dow Corning, a joint venture owned equally by Dow Chemical and Corning of the US, still denies that the silicone gel implants it manufactured until 1992 can cause suffering or illness. However, last November it reached agreement with a tort claimants committee to settle the dispute.

The committee, which is made up of attorneys representing the claimants and lawyers with experience of other medical devices claims, supports the so-called "amended joint plan of reorganisation", but some hurdles remain.

Dow Corning's commercial creditors, who are owed \$1bn

and are arguing over a further \$300m in interest payments, have asked their constituents to vote against the proposal.

The creditors make up a class, and all classes must normally accept the proposal for it to go through.

Dow Corning said, however, that District Judge Arthur Spector, who will hear the case in Michigan in June, has some discretion over whether to take the creditors' objections into consideration.

The company is also establishing a call centre in New York, which will be staffed by more than 500 people able to provide information for claimants 16 hours a day, six days a week.

The potential payments range from \$2,000 to \$250,000.

Group prepares to emerge from traumatic five years

The silicone products venture is refocusing on core businesses as it begins to move out of bankruptcy protection, writes David Pilling

The past five years have been traumatic at Dow Corning. Not only has the Midland, Michigan, maker of silicone-based products been in Chapter 11 bankruptcy protection since May 1993, but its very name has come to be associated with breast implants and the suffering they are alleged to have caused millions of women worldwide.

Today, as the company begins the lengthy process of extricating itself from bankruptcy protection, it is seeking to refocus attention on the non-implant side of its business. Even at the height of breast-implant sales, its production of silicone products for the automotive, construction, electronics and beauty industries made up 99 per cent of revenue.

The company stopped making breast implants in 1992 after women began complaining of illnesses they said were due to leaking silicone.

Dow Corning, a joint venture between Dow Chemical and Corning, a glassmaker, admits that silicone implants ruptured in up to 5 per cent of cases and that some women experience a hardening of tissue around the implant. But it has argued that these conditions are not life-threatening and that no link has been established with other, more serious, disorders.

Today, Dow will send out 176,000 letters to women worldwide who have made breast implant claims against the company. Women will be offered payments ranging from \$2,000 to \$250,000 for the most serious

conditions. The total bill will be \$3.2bn, of which Dow Corning will meet \$500m from cash reserves and about \$1bn from insurance. The company will set aside a further \$1.3bn for creditors.

If enough women accept the offer, the company should be able to emerge from Chapter 11 this year.

"We are bringing finality to the issue, which gives us the opportunity to focus totally on the business. When we come out of Chapter 11 no one can ever come after us for the same type of claims"

"We are bringing finality to the issue, which gives us the opportunity to focus totally on the business," says Jerry Marcinik, European area president at Dow Corning.

"When we come out of Chapter 11 no one can ever come after us for the same type of claims."

But neither has the company's core silicone business been immune from difficulties. A high dollar and falling demand in Asia, and subsequently the rest of the world, made 1998 what John Churchfield, chief financial officer, called a "challenging" year.

Profits fell 13 per cent to \$206.7m on sales down 3 per

cent to \$2.57bn. Mr Churchfield said he did not expect to see any "strengthening of our short-term growth prospects".

The company also announced a fourth-quarter restructuring charge of \$38.1m to undertake plant closures in Europe, the Americas and Asia and a corporate reorganisation around product segments rather than geographical area.

Along with what Mr Marcinik calls "consolidation of our global supply chain", Dow Corning has invested heavily in SAP software in an effort to raise efficiency and declining margins. He believes the \$100m investment should start paying for itself by mid-year.

Mr Marcinik, who is being transferred from Europe to head one of the product divisions, puts a brave face on the past few years.

The company has not lost any of its big customers, nor has it seen staff turnover accelerate, he says.

The experience, he argues, has underlined the importance of putting the customer first.

By the company's own admission, however, it will not be easy to remove the taint of the breast-implant saga.

Richard Hazleton, chairman and chief executive of Dow Corning, said in a recent speech that the company had apparently got stuck with a new name: "Dow Corning, hyphen, Once the World's Largest Maker of Silicone Breast Implants."

EMERGING MARKETS FALLING INTEREST RATES FUEL INTEREST OF SMALL INVESTORS IN EQUITIES

Greeks try their luck with shares

By Karin Hope in Athens

Popular capitalism has at last arrived in Greece. A sharp fall in interest rates on government bonds has sent investors to the stock market in droves and pushed share prices to record heights.

On Friday the Athens general index hit a new high of 3,537.9, marking a 39.2 per cent gain this year in drachma terms. Investors piled into bank stocks amid reports that bidding would be aggressive in the privatisation sale later this month of a majority stake in Ionian Bank, Greece's fourth-largest banking group.

"This rally is retail-driven," said George Boyatzis, analyst at Omega Securities. "The market seems over-priced to foreign institutions, but domestic investors who trade small amounts are seeing big returns."

Brokers estimate that the number of share-owners in Greece has doubled over the past six months to about 1m - almost 10 per cent of the population - and is steadily rising. Television advertising aimed at small savers helped boost demand for shares in companies being partly privatised.

Public offerings by Ote, the state telecom company, Hellenic Petroleum, the state

oil refining company, and National Bank of Greece, the country's biggest banking group, all attracted new investors.

However, the rush into equities came after interest rates on Treasury bills, the most popular form of household savings, fell below 10 per cent.

Greek investors had grown accustomed to double-digit interest rates on government paper during a decade of high inflation but rates on the 12-month Treasury bill, the benchmark for small savers, have declined steadily as inflation has slowed. Interest rates on savings deposits have followed suit.

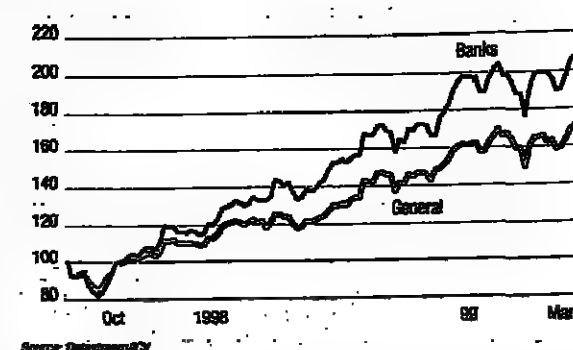
With inflation projected to fall this month from 3.7 per cent to 3.3 per cent, rates on 12-month bills have shrunk to 9.2 per cent against 10.2 per cent in January. The supply of Treasury bills is also diminishing fast as the finance ministry tries to reduce debt-financing costs by issuing bonds with longer maturities.

Increasing confidence that Greece is on track to reduce inflation below 2 per cent this year and qualify to join the euro-zone in 2001 underpins the market's rise.

"The view on Greece is positive, provided that inflation continues to come down," said Miranda Xafa,

Greece

Athens SE index (rebased)



Source: DataStream/FT

an economics analyst at Salomon Smith Barney in London.

The market shrugged off a political crisis over Greece's involvement in the capture of Abdullah Ocalan, the Kurdish guerrilla leader, which cost three cabinet ministers their jobs. It helped that the drachma stayed firm and that international investors showed little concern about the government's stability.

"The feeling is that only a big international crisis could derail Greece's effort to join the euro," said Joanna Tseloudi, analyst at Midland Pantheleis Securities. "Tensions with Turkey have been discounted."

However, Greece's new investors have stunned the blue-chip industrial popular

with international institutions in favour of banks and small companies that have underperformed the market.

The banking index has jumped 35 per cent this year in anticipation of a fresh round of consolidation in the sector. The parallel market for small-capitalisation companies has risen 85 per cent.

Small investors see bank shares as a safe bet, especially the big state-controlled institutions that dominate the sector. Most banks showed strong profit growth last year, although in many cases gains on their large portfolios of government bonds outweighed earnings from banking activities.

National Bank of Greece, the favourite among new investors, has outperformed the index, following a four-

for-one share split and the announcement of a Dr180bn to Dr200bn (\$606m-\$674m) rights issue, which would be the largest to date in Greece.

Private banks are also exploiting investor appetite for banking issues to raise large sums to fund expansion and acquisitions.

Piraeus Bank, a keen contender to acquire Ionian, raised Dr120bn in January to strengthen its bidding position and plans to seek another Dr120bn. Xicobank, a Piraeus subsidiary, is about to raise Dr370m.

EFG Eurobank, another bidder for Ionian, has timed its listing on the stock market tomorrow, through a merger with subsidiary Bank of Athens, to take advantage of excitement over the privatisation deal. Its offer is priced at almost four times book value in hopes of strong demand.

Ionian itself led the bank sector's rise last week. Its share price improved 16.5 per cent as the March 26 deadline for binding offers for a 51 per cent stake held by its parent group, Commercial Bank, came closer.

"The Ionian sale will be the driving factor in the market," Ms Tseloudi said. "Everyone's attention will be focused on the deal and it's important for the government to pull off a successful privatisation."

Toy tycoon to buy Four Seasons Hotel

By Andrew Edgecliffe-Johnson

Ty Warner, the toy tycoon who created Beanie Babies, is buying the Four Seasons Hotel in New York for \$270m.

Mr Warner, whose bean bag stuffed animals created a craze among collectors, is paying almost \$750,000 per room for the trophy property.

Greg Rice, president of Solid Rock Advisors, which acted for Mr Warner in the purchase, said the Four Seasons would be his first hotel but would not comment on whether Mr Warner planned to make further hotel acquisitions.

The founder of Ty Inc, who has a policy of not talking to the press, has earned a reputation for astute marketing by deliberately "retiring" models to increase their rarity value. The toys, which initially sell for little more than \$5, can change hands for several thousands of dollars.

The Illinois-based group has produced more than 300 Beanie Babies, and spawned magazines featuring the likes of Hope, the praying bear, and Goochy, the Ty-die jellyfish. Ty Inc, a pri-

vate company, does not release details of its sales or profits.

Mr Warner is buying New York's tallest hotel from a consortium of Hong Kong based investors, led by Lai Sun Hotels International.

Barry Ross of Robinson, Silverman, Pearce, Aronson & Berman, the law firm that represented Lai Sun, said: "They bought at a very opportune time and the market has improved."

He added that Lai Sun, which also co-owns the Ritz Carlton in Hong Kong, "view the Asian market as a better place to invest right now".

The consortium paid \$190m in 1996 for the 52-storey hotel, which had cost about \$600m when it was built at the start of the decade.

At the time of construction the 371-room building, designed by the Japanese architect I M Pei, was the most expensive hotel ever built, based on the cost per room.

Mr Rice said the hotel, which is managed under a long-term contract by the Four Seasons group, had the highest average daily room rate of any in New York, at more than \$600.

Nissan and Renault said to be close to alliance

By Alexandra Rennie in Tokyo

Nissan Motor and Renault, the French vehicle maker, appeared to be close to agreeing a strategic alliance, including a capital tie-up, as Yoshiyuki Hanawa, Nissan president, said.

Nissan said Mr Hanawa had left the country on business. His departure followed the collapse of talks with DaimlerChrysler about a capital tie-up last week.

If a tie-up is agreed with Renault along the lines of speculation in the Japanese press, it would be the largest investment by a foreign vehicle manufacturer in Japan since Ford Motor of the US raised its stake in Mazda from 26 to 33.4 per cent in 1986. It would help Nissan, the country's second largest vehicle maker, to eliminate Y2,500bn in net interest-bearing liabilities and return it to profitability.

An alliance with Renault would also reassure investors and Japanese government officials. Concern about Nissan's prospects in the wake of the collapse of talks drove its share price down 17 per cent last week, from Y486 to Y401 at the close of trading on Friday.

Several issues will need to be resolved. Chief among these would be Nissan's interest-bearing liabilities, as well as an undisclosed amount of debt within its dealer network. The size of these liabilities, and the reluctance of Nissan's main lenders to renegotiate the terms of the debt, was believed to be one of the reasons Nissan failed to reach a deal with DaimlerChrysler.

The fate of Nissan's loss-making truck and engine unit, Nissan Diesel, would also have to be decided. Nissan Diesel brought the parent company into negotiations with DaimlerChrysler, which withdrew its bid to buy a stake in either Nissan or Nissan Diesel last week.

Tsuyoshi Mochimaru, at DaimlerChrysler's Tokyo, said solving the problems with Nissan Diesel was Nissan's first priority.

An agreement would bring to a close months of negotiations between Renault and Nissan about strengthening co-operative ties that began last summer. They are said to have entered official talks in January, although Nissan has denied it had received a formal offer from Renault.

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FT GUIDE TO WORLD CURRENCIES

The table below gives the latest available rates of exchange (rounded against four key currencies on Friday, March 12, 1999). In some cases the rate is nominal. Market rates are the average of buying and selling rates except where they are shown to be otherwise. In some cases market rates have been calculated from those of foreign currencies to which they are pegged.

	£ STG	US \$	DM	¥	Other	£ STG	US \$	DM	¥	Other	£ STG	US \$	DM	¥	Other
Algeria	172.68	478.38	512.17	3064.69		Algeria	172.68	478.38	512.17	3064.69	Algeria	172.68	478.38	512.17	3064.69
Algeria	320.33	140.95	154.12	118.247		Algeria	320.33	140.95	154.12	118.247	Algeria	320.33	140.95	154.12	118.247
Algeria	105.818	10.95	12.02	11.008		Algeria	105.818	10.95	12.02	11.008	Algeria	105.818	10.95	12.02	11.008
Algeria	179.43	5.651	6.5258	5.1088		Algeria	179.43	5.651	6.5258	5.1088	Algeria	179.43	5.651	6.5258	5.1088
Algeria	248.48	192.52	211.21	167.35		Algeria	248.48	192.52	211.21	167.35	Algeria	248.48	192.52	211.21	167.35
Algeria	420.42	257.25	263.88	217.14		Algeria	420.42	257.25	263.88	217.14	Algeria	420.42	257.25	263.88	217.14
Algeria	4.418	2.708	2.947	2.261		Algeria	4.418	2.708	2.947	2.261	Algeria	4.418	2.708	2.947	2.261
Algeria	1.933	0.196	0.196	0.196		Algeria	1.933	0.196	0.196	0.196	Algeria	1.933	0.196	0.196	0.196
Algeria	882.29	380.38	380.38	429.35		Algeria	882.29	380.38	380.38	429.35	Algeria	882.29	380.38	380.38	429.35
Algeria	3.005	0.678	0.678	0.678		Algeria	3.005	0.678	0.678	0.678	Algeria	3.005	0.678	0.678	0.678
Algeria	3.584	1.525	1.525	1.525		Algeria	3.584	1.525	1.525	1.525	Algeria	3.584	1.525	1.525	1.525
Algeria	30.559	12.540	13.703	10.549		Algeria	30.559	12.540	13.703	10.549	Algeria	30.559	12.540	13.703	10.549
Algeria	0.654	28.634	32.173	16.988		Algeria	0.654	28.634	32.173	16.988	Algeria	0.654	28.634	32.173	16.988
Algeria	299.34	181.97	181.97	181.97		Algeria	299.34	181.97	181.97	181.97	Algeria	299.34	181.97	181.97	181.97
Algeria	1.6340	1.004	1.004	1.004		Algeria	1.6340	1.004	1.004	1.004	Algeria	1.6340	1.004	1.004	1.004
Algeria	6.818	0.271	0.418	0.418		Algeria	6.818	0.271	0.418	0.418	Algeria	6.818	0.271	0.418	0.418
Algeria	248.42	152.84	158.36	127.51		Algeria	248.42	152.84	158.36	127.51	Algeria	248.42	152.84	158.36	127.51
Algeria	79.241	48.509	50.949	40.979		Algeria	79.241	48.509	50.949	40.979	Algeria	79.241	48.509	50.949	40.979
Algeria	3.208	5.189	5.189	4.771		Algeria	3.208	5.189	5.189	4.771	Algeria	3.208	5.189	5.189	4.771
Algeria	30.649	20.000	24.972	0.148234		Algeria	30.649	20.000	24.972	0.148234	Algeria	30.649	20.000	24.972	0.148234
Algeria	62.229	30.847	30.847	26.847		Algeria	62.229	30.847	30.847	26.847	Algeria	62.229	30.847	30.847	26.847
Algeria	3.328	2.000	2.189	1.773		Algeria	3.328	2.000	2.189	1.773	Algeria	3.328	2.000	2.189	1.773
Algeria	99.430	99.410	99.415	90.025		Algeria	99.430	99.410	99.415	90.025	Algeria	99.430	99.410	99.415	90.025
Algeria	1.6340	0.645	0.3518	0.3618		Algeria	1.6340	0.645	0.3518	0.3618	Algeria	1.6340	0.645	0.3518	0.3618
Algeria	98.349	42.475	42.475	32.629		Algeria	98.349	42.475	42.475	32.629	Algeria	98.349	42.475	42.475	32.629
Algeria	3.245	0.200	0.200	0.200		Algeria	3.245	0.200	0.200	0.200	Algeria	3.245	0.200	0.200	0.200
Algeria	2.929	1.788	1.978	1.502		Algeria	2.929	1.788	1.978	1.502	Algeria	2.929	1.788	1.978	1.502
Algeria	3.119	1.875	2.075	1.603		Algeria	3.119	1.875	2.075	1.603	Algeria	3.119	1.875	2.075	1.603
Algeria	2.536	1.922	1.954	1.433		Algeria	2.536	1.922	1.954	1.433	Algeria	2.536	1.922	1.954	1.433
Algeria	2.86	1.718	1.746	1.415		Algeria	2.86	1.718	1.746	1.415	Algeria	2.86	1.718	1.746	1.415
Algeria	97.940	59.440	59.440	50.875		Algeria	97.940	59.440	59.440	50.875	Algeria	97.940	59.440	59.440	50.875
Algeria	16.133	6.813	6.813	5.407		Algeria	16.133	6.813	6.813	5.407	Algeria	16.133	6.813	6.813	5.407
Algeria	55.761	526.158	526.158	441.407		Algeria	55.761	526.158	526.158	441.407	Algeria	55.761	526.158	526.158	441.407
Algeria	5.61838	3776.09	473.22	3167.79		Algeria	5.61838	3776.09	473.22	3167.79	Algeria	5.61838	3776.09	473.22	3167.79
Algeria	97.940	59.440	59.440	50.875		Algeria	97.940	59.440	59.440	50.875	Algeria	97.940	59.440	59.440	50.875
Algeria	2.86	1.718	1.746	1.415		Algeria	2.86	1.718	1.746	1.415	Algeria	2.86	1.718	1.746	1.415
Algeria	44.432	158.418	158.418	127.581		Algeria	44.432	158.418	158.418	127.581	Algeria	44.432	158.418	158.418	127.581
Algeria	154.748	10.95	12.02	11.008		Algeria	154.748	10.95	12.02	11.008	Algeria	154.748	10.95	12.02	11.008
Algeria	1.7616	0.333	0.333	0.333		Algeria	1.7616	0.333	0.333	0.333	Algeria	1.7616	0.333	0.333	0.333
Algeria	97.940	59.440	59.440	50.875		Algeria	97.940	59.440	59.440	50.875	Algeria	97.940	59.440	59.440	50.875
Algeria	154.748	10.95	12.02	11.008		Algeria	154.748	10.95	12.02	11.008	Algeria	154.748	10.95	12.02	11.008
Algeria	100.00	481.498	481.498	412.298		Algeria	100.00	481.498	481.498	412.298	Algeria	100.00	481.498	481.498	412.298
Algeria	1.530	0.645	0.645	0.645		Algeria	1.530	0.645	0.645	0.645	Algeria	1.530	0.645	0.645	0.645
Algeria	2536.79	1564.38	1572.11	1317.56		Algeria	2536.79	1564.38	1572.11	1317.56	Algeria	2536.79	1564.38	1572.11	1317.56
Algeria	97.940	59.440	59.440	50.875		Algeria	97.940	59.440	59.440	50.875	Algeria	97.940	59.440	59.440	50.875
Algeria	17.616	0.333	0.333	0.333		Algeria	17.616	0.333	0.333	0.333	Algeria	17.616	0.333	0.333	0.333
Algeria	10.671	1.15233	1.15233	0.923		Algeria	10.671	1.15233	1.15233	0.923	Algeria	10.671	1.15233	1.15233	0.923
Algeria	97.940	59.440	59.440	50.875		Algeria	97.940	59.440	59.440	50.875	Algeria	97.940	59.440	59.440	50.875
Algeria	11.739	2.125	2.125	1.813		Algeria	11.739	2.125	2.125	1.813	Algeria	11.739	2.125	2.125	1.813
Algeria	37.263	190.263	190.263	158.263		Algeria	37.263	190.263	190.263	158.263	Algeria	37.263	190.263	190.263	158.263
Algeria	0.645	0.338	0.338	0.338		Algeria	0.645	0.338	0.338	0.338	Algeria	0.645	0.338	0.338	0.338
Algeria	36.332	19.023	19.023	16.023		Algeria	36.332	19.023	19.023	16.023	Algeria	36.332	19.023	19.023	16.023
Algeria	11.093	6.727	7.529	6.444		Algeria	11.093	6.727	7.529	6.444	Algeria	11.093	6.727	7.529	6.444
Algeria	200.385	149.698	149.698	124.698		Algeria	200.385	149.698	149.698	124.698	Algeria	200.385	149.698	149.698	124.698
Algeria	4.818	2.708	2.947	2.261		Algeria	4.818	2.708	2.947	2.261	Algeria	4.818	2.708	2.947	2.261
Algeria	38.823	15.528	17.448	13.989		Algeria	38.823	15.528	17.448	13.989	Algeria	38.823	15.528	17.448	13.989
Algeria	11.7119	6.727	7.529	6.444		Algeria	11.7119	6.727	7.529	6.444	Algeria	11.7119	6.727	7.529	6.444
Algeria	197.71	170.18	170.18	143.18		Algeria	197.71	170.18	170.18	143.18	Algeria	197.71	170.18	170.18	143.18
Algeria	2.446	3.403	3.403	2.871		Algeria	2.446	3.403	3.403	2.871	Algeria	2.446	3.403	3.403	2.871
Algeria	11.7119	6.727	7.529	6.444		Algeria	11.7119	6.727	7.529	6.444	Algeria	11.7119	6.727	7.529	6.444
Algeria	97.940	59.440	59.440	50.875		Algeria	97.940	59.440	59.440	50.875	Algeria	97.940	59.440	59.440	50.875
Algeria	15.825	11.657	11.657	9.657		Algeria	15.825	11.657	11.657	9.657	Algeria	15.825	11.657	11.657	9.657
Algeria	11.814	6.898	7.873	6.862		Algeria	11.814	6.898	7.873	6.862	Algeria	11.814	6.898	7.873	6.862
Algeria	1.0	0.970	0.678	0.514		Algeria	1.0	0.970	0.678	0.514	Algeria	1.0	0.970	0.678	0.514
Algeria	11.093	6.727	7.529	6.444		Algeria	11.093	6.727	7.529	6.444	Algeria	11.093	6.727	7.529	6.444
Algeria	3.229	2.182	2.182	1.813		Algeria	3.229	2.182	2.182	1.813	Algeria	3.229	2.182	2.182	1.813
Algeria	10.671	5.422	5.422	4.572		Algeria	10.671	5.422	5.422	4.572	Algeria	10.671	5.422	5.422	4.572
Algeria	97.943	5.941	5.998	5.028		Algeria	97.943	5.941	5.998	5.028	Algeria	97.943	5.941	5.998	5.028
Algeria	97.940	59.440	59.440	50.875		Algeria	97.940	59.440	59.440	50.875	Algeria	97.940	59.440	59.440	50.875
Algeria	97.943	5.941	5.998	5.028		Algeria	97.943	5.941	5.998	5.028	Algeria	97.943	5.941	5.998	5.028
Algeria	10.671	5.422	5.422	4.572		Algeria	10.671	5.422	5.422	4.572	Algeria	10.671	5.422	5.422	4.572
Algeria	18.828	11.250	12.315	9.470		Algeria	18.828	11.250	12.315	9.470	Algeria	18.828	11.250	12.315	9.470
Algeria	2.953	1.958	2.000	1.678		Algeria	2.953	1.958	2.000	1.678	Algeria	2.953	1.958	2.000	1.678
Algeria	3812.44	2365.50	2365.50	2008.25		Algeria	3812.44	2365.50	2365.50	2008.25	Algeria	3812.44	2365.50	2365.50	2008.25

EURO PRICES

EQUITIES

Investors seek upside from Lafontaine

EUROPEAN OVERVIEW
By Florian Gimmel

European equities are expected to start the week on a positive note following the surprise resignation of Oskar Lafontaine, the German finance minister.

Additional support for the market is likely to come from continuing merger talk in the French banking sector

and the prospect of higher oil prices.

German equity investors, in particular, stand to gain from Mr Lafontaine's resignation, with his controversial tax reform plans likely to be dropped in the near term.

But the implications of this political upheaval are likely to go well beyond Germany, casting a brighter light on the entire euro-zone, Ian Scott at Lehman

Brothers thought Mr Lafontaine's resignation was the latest in a series of events, signalling a more "investor-friendly" business climate in Europe.

"The departure of the German finance minister certainly is the dominant factor, but the merger activity in France and the latest UK budget have strongly contributed to a change in perceptions," said Mr Scott.

He thought the immediate beneficiaries of the latest events would be those sectors that were "well represented" in Germany, such as cars and capital goods.

But others were less optimistic. "Lafontaine's resignation is reducing the downside risk of investing in Europe, but it adds very little upside potential," said Mark Howdle at Salomon Smith Barney.

He thought most of the euro-zone's problems were in part "Lafontaine-related", ranging from higher European bond yields to the weakness of the euro. The latter has deterred portfolio flows from non-European sources, with US investors, in particular, taking a wait-and-see approach.

But Mr Howdle was not convinced Mr Lafontaine's departure was enough to change the current outlook for the euro-zone. "European shares are now fairly valued in relation to bonds. Equity risk premiums have eroded since late January, falling below our 3 per cent target level," he said.

The FTSE Eurotop 300 index closed last week 0.08

higher at 1,259.66, while the

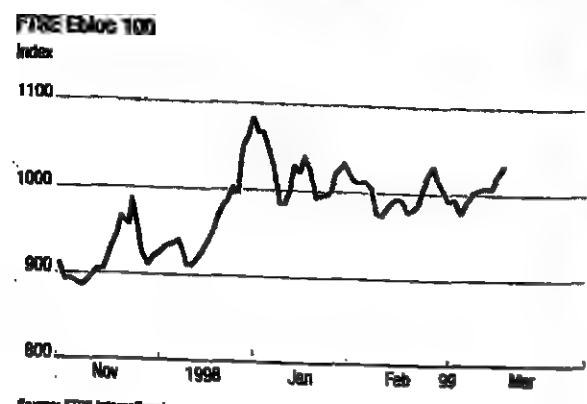
FTSE Eurotop 100 fell 2.28 to

2,911.64. The FTSE Ebluc

index of leading stocks in the

euro-zone settled 13.11

higher at 1,036.51.



Source: FTSE International

THREE MONTH EUROBOB FUTURES (LFE) €1m 100-rate

	Open	Sell price	Change	High	Low	Set. vol.	Open int.
Mar	98.970	98.950	+0.010	99.070	98.950	32526	142638
Jun	97.110	97.100	+0.010	97.210	97.070	63919	166308
Dec	97.180	97.170	+0.010	97.280	97.140	47708	141308
Dec	96.840	96.830	+0.010	96.940	96.810	13302	97138

THREE MONTH EURO LIBOR FUTURES (LFE) €1m 100-rate

	Open	Sell price	Change	High	Low	Set. vol.	Open int.
Mar	96.950	96.940	+0.010	97.050	96.920	9165	116745
Jun	97.100	97.090	+0.010	97.200	97.070	371	106605
Dec	97.130	97.120	+0.010	97.230	97.100	180	93101
Dec	96.810	96.800	+0.010	96.910	96.780	387	83897

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Dec	97.130	97.120	+0.010	97.230	97.100	180	93101
Dec	96.810	96.800	+0.010	96.910	96.780	387	83897

THREE MONTH EURO LIBOR FUTURES (LFE) €1m 100-rate

	Open	Sell price	Change	High	Low	Set. vol.	Open int.
Mar	96.950	96.940	+0.010	97.050	96.920	9165	116745
Jun	97.100	97.090	+0.010	97.200	97.070	371	106605
Dec	97.130	97.120	+0.010	97.230	97.100	180	93101
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Dec	96.810	96.800	+0.010	96.910	96.780	387	83897

CONSTRUCTION & BUILDING							
				Rails	13.95	-7 8.6 2.5	
				Trucks	11.87	-1 19.9 1.5	
				GIS	65	+1 12.0 0.5	
Highways	249.18	-3.6	6.7	- 1.8	H & M B	11.56	+1 16.2 3.6
City	17.18		5.7	41 2.4	Quigley	5.94	+2 15.0 11.9
Fltn		-1	5.1	1	Marion & S	2.25	+2.0 28.0 0.3
Plumbing	597.15	+5.2	5.1	1.3	Plumbing	195	-1.0 28.7
Construction & Building	82.78	+3.0	0.5	0.0	Plumbing Pits		
		10.0	13.1	2.0			

INVESTMENT TRUSTS - Continued

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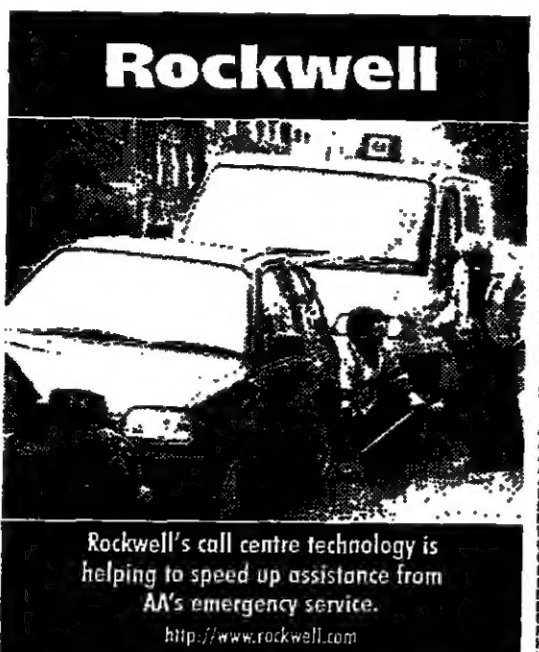
FT MANAGED FUNDS SERVICE[illegible]

Ad chief in growth pledge

Highs & Lows shown on a 52 week basis

WORLD STOCK MARKETS

EUROPE (EMU) Prices in €									
Stock	Price	Change	High	Low	52 Week High	52 Week Low	Vol	Open	Close
Austria (Mar 12) € = 13.7600 Sfr									
Alpine	29.75	+0.25	30.00	29.50	30.00	29.00	100	29.50	29.75
Alpine	29.75	+0.25	30.00	29.50	30.00	29.00	100	29.50	29.75
Belgium (Mar 12) € = 40.3390 Ffr									
Alcatel	120.00	+1.00	121.00	119.00	121.00	118.00	100	119.00	120.00
Alcatel	120.00	+1.00	121.00	119.00	121.00	118.00	100	119.00	120.00
Germany (Mar 12) € = 193.50 DM									
Adidas	120.00	+1.00	121.00	119.00	121.00	118.00	100	119.00	120.00
Adidas	120.00	+1.00	121.00	119.00	121.00	118.00	100	119.00	120.00
France (Mar 12) € = 6.5595 Ffr									
Alcatel	120.00	+1.00	121.00	119.00	121.00	118.00	100	119.00	120.00
Alcatel	120.00	+1.00	121.00	119.00	121.00	118.00	100	119.00	120.00
Italy (Mar 12) € = 1936.2700 Lit									
Alcatel	120.00	+1.00	121.00	119.00	121.00	118.00	100	119.00	120.00
Alcatel	120.00	+1.00	121.00	119.00	121.00	118.00	100	119.00	120.00
Spain (Mar 12) € = 165.2600 Ptas									
Alcatel	120.00	+1.00	121.00	119.00	121.00	118.00	100	119.00	120.00
Alcatel	120.00	+1.00	121.00	119.00	121.00	118.00	100	119.00	120.00
UK (Mar 12) £ = 1.0000									
Alcatel	120.00	+1.00	121.00	119.00	121.00	118.00	100	119.00	120.00
Alcatel	120.00	+1.00	121.00	119.00	121.00	118.00	100	119.00	120.00
Japan (Mar 12) ¥ = 100.00									
Alcatel	120.00	+1.00	121.00	119.00	121.00	118.00	100	119.00	120.00
Alcatel	120.00	+1.00	121.00	119.00	121.00	118.00	100	119.00	120.00
South Korea (Mar 12) ₩ = 100.00									
Alcatel	120.00	+1.00	121.00	119.00	121.00	118.00	100	119.00	120.00
Alcatel	120.00	+1.00	121.00	119.00	121.00	118.00	100	119.00	120.00
Taiwan (Mar 12) NT\$ = 100.00									
Alcatel	120.00	+1.00	121.00	119.00	121.00	118.00	100	119.00	120.00
Alcatel	120.00	+1.00	121.00	119.00	121.00	118.00	100	119.00	120.00
Hong Kong (Mar 12) HK\$ = 100.00									
Alcatel	120.00	+1.00	121.00	119.00	121.00	118.00	100	119.00	120.00
Alcatel	120.00	+1.00	121.00	119.00	121.00	118.00	100	119.00	120.00
Singapore (Mar 12) S\$ = 100.00									
Alcatel	120.00	+1.00	121.00	119.00	121.00	118.00	100	119.00	120.00
Alcatel	120.00	+1.00	121.00	119.00	121.00	118.00	100	119.00	120.00
Australia (Mar 12) A\$ = 100.00									
Alcatel	120.00	+1.00	121.00	119.00	121.00	118.00	100	119.00	120.00
Alcatel	120.00	+1.00	121.00	119.00	121.00	118.00	100	119.00	120.00
New Zealand (Mar 12) NZ\$ = 100.00									
Alcatel	120.00	+1.00	121.00	119.00	121.00	118.00	100	119.00	120.00
Alcatel	120.00	+1.00	121.00	119.00	121.00	118.00	100	119.00	120.00
Canada (Mar 12) C\$ = 100.00									
Alcatel	120.00	+1.00	121.00	119.00	121.00	118.00	100	119.00	120.00
Alcatel	120.00	+1.00	121.00	119.00	121.00	118.00	100	119.00	120.00
USA (Mar 12) \$ = 100.00									
Alcatel	120.00	+1.00	121.00	119.00	121.00	118.00	100	119.00	120.00
Alcatel	120.00	+1.00	121.00	119.00	121.00	118.00	100	119.00	120.00



Rockwell

Rockwell's call centre technology is helping to speed up assistance from AA's emergency service.

<http://www.rockwell.com>

FT/SPS ACTUARIES WORLD INDICES										Emerging markets:									
FT/SPS Actuaries World Indexes are owned by FTSE International Limited, London, S&P 500 and Standard & Poor's. The indices are compiled by FTSE International Limited and Standard & Poor's in conjunction with the Faculty of Actuaries of the Institute of Actuaries.										IFC investible indices									
NATIONAL AND REGIONAL STOCK INDICES										NATIONAL AND REGIONAL STOCK INDICES									
Index	Value	Change	High	Low	52 Week High	52 Week Low	Vol	Open	Close	Index	Value	Change	High	Low	52 Week High	52 Week Low	Vol	Open	Close
FRIDAY 22 FEB 1990										THURSDAY 22 FEB 1990									
US S&P 500	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	US S&P 500	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
US Dow Jones	10000.00	+100.00	10100.00	9900.00	10100.00	9800.00	100	9900.00	10000.00	US Dow Jones	10000.00	+100.00	10100.00	9900.00	10100.00	9800.00	100	9900.00	10000.00
UK FTSE 100	4000.00	+40.00	4040.00	3960.00	4040.00	3900.00	100	3960.00	4000.00	UK FTSE 100	4000.00	+40.00	4040.00	3960.00	4040.00	3900.00	100	3960.00	4000.00
Germany DAX	3000.00	+30.00	3030.00	2970.00	3030.00	2900.00	100	2970.00	3000.00	Germany DAX	3000.00	+30.00	3030.00	2970.00	3030.00	2900.00	100	2970.00	3000.00
France CAC 40	3000.00	+30.00	3030.00	2970.00	3030.00	2900.00	100	2970.00	3000.00	France CAC 40	3000.00	+30.00	3030.00	2970.00	3030.00	2900.00	100	2970.00	3000.00
Italy ISEQ	2000.00	+20.00	2020.00	1980.00	2020.00	1900.00	100	1980.00	2000.00	Italy ISEQ	2000.00	+20.00	2020.00	1980.00	2020.00	1900.00	100	1980.00	2000.00
Spain IBEX 35	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	Spain IBEX 35	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
Japan Nikkei	10000.00	+100.00	10100.00	9900.00	10100.00	9800.00	100	9900.00	10000.00	Japan Nikkei	10000.00	+100.00	10100.00	9900.00	10100.00	9800.00	100	9900.00	10000.00
South Korea KOSPI	2000.00	+20.00	2020.00	1980.00	2020.00	1900.00	100	1980.00	2000.00	South Korea KOSPI	2000.00	+20.00	2020.00	1980.00	2020.00	1900.00	100	1980.00	2000.00
Taiwan TSEI	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	Taiwan TSEI	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
Hong Kong HSI	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	Hong Kong HSI	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
Singapore SSEC	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	Singapore SSEC	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
Australia ASX 200	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	Australia ASX 200	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
New Zealand NZSE 200	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	New Zealand NZSE 200	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
Canada TSX 300	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	Canada TSX 300	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
USA S&P 500	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	USA S&P 500	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
USA Dow Jones	10000.00	+100.00	10100.00	9900.00	10100.00	9800.00	100	9900.00	10000.00	USA Dow Jones	10000.00	+100.00	10100.00	9900.00	10100.00	9800.00	100	9900.00	10000.00
USA NASDAQ	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	USA NASDAQ	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
USA Russell 2000	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	USA Russell 2000	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
USA S&P 500	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	USA S&P 500	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
USA Dow Jones	10000.00	+100.00	10100.00	9900.00	10100.00	9800.00	100	9900.00	10000.00	USA Dow Jones	10000.00	+100.00	10100.00	9900.00	10100.00	9800.00	100	9900.00	10000.00
USA NASDAQ	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	USA NASDAQ	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
USA Russell 2000	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	USA Russell 2000	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
USA S&P 500	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	USA S&P 500	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
USA Dow Jones	10000.00	+100.00	10100.00	9900.00	10100.00	9800.00	100	9900.00	10000.00	USA Dow Jones	10000.00	+100.00	10100.00	9900.00	10100.00	9800.00	100	9900.00	10000.00
USA NASDAQ	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	USA NASDAQ	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
USA Russell 2000	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	USA Russell 2000	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
USA S&P 500	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	USA S&P 500	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
USA Dow Jones	10000.00	+100.00	10100.00	9900.00	10100.00	9800.00	100	9900.00	10000.00	USA Dow Jones	10000.00	+100.00	10100.00	9900.00	10100.00	9800.00	100	9900.00	10000.00
USA NASDAQ	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	USA NASDAQ	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
USA Russell 2000	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	USA Russell 2000	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
USA S&P 500	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	USA S&P 500	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
USA Dow Jones	10000.00	+100.00	10100.00	9900.00	10100.00	9800.00	100	9900.00	10000.00	USA Dow Jones	10000.00	+100.00	10100.00	9900.00	10100.00	9800.00	100	9900.00	10000.00
USA NASDAQ	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	USA NASDAQ	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
USA Russell 2000	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	USA Russell 2000	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
USA S&P 500	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	USA S&P 500	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
USA Dow Jones	10000.00	+100.00	10100.00	9900.00	10100.00	9800.00	100	9900.00	10000.00	USA Dow Jones	10000.00	+100.00	10100.00	9900.00	10100.00	9800.00	100	9900.00	10000.00
USA NASDAQ	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	USA NASDAQ	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
USA Russell 2000	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	USA Russell 2000	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
USA S&P 500	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	USA S&P 500	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
USA Dow Jones	10000.00	+100.00	10100.00	9900.00	10100.00	9800.00	100	9900.00	10000.00	USA Dow Jones	10000.00	+100.00	10100.00	9900.00	10100.00	9800.00	100	9900.00	10000.00
USA NASDAQ	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	USA NASDAQ	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
USA Russell 2000	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	USA Russell 2000	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
USA S&P 500	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	USA S&P 500	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
USA Dow Jones	10000.00	+100.00	10100.00	9900.00	10100.00	9800.00	100	9900.00	10000.00	USA Dow Jones	10000.00	+100.00	10100.00	9900.00	10100.00	9800.00	100	9900.00	10000.00
USA NASDAQ	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	USA NASDAQ	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
USA Russell 2000	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	USA Russell 2000	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
USA S&P 500	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	USA S&P 500	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
USA Dow Jones	10000.00	+100.00	10100.00	9900.00	10100.00	9800.00	100	9900.00	10000.00	USA Dow Jones	10000.00	+100.00	10100.00	9900.00	10100.00	9800.00	100	9900.00	10000.00
USA NASDAQ	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	USA NASDAQ	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
USA Russell 2000	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	USA Russell 2000	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
USA S&P 500	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00	USA S&P 500	1000.00	+10.00	1010.00	990.00	1010.00	980.00	100	990.00	1000.00
USA Dow Jones	10000.00	+100.00	10100.00	9900.00	10100.00	9800.00	100	9900.00	10000.00	USA Dow Jones	10000.00	+100.00	10100.00	9900.00	10100.00	9800.00	100	9900.00	10000.00</

4 pm close March 12

NEW YORK STOCK EXCHANGE PRICES

A									
B									
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IN. SECTS (Pan European Sector Indices from EuroBench®)									
The IN. SECTS - pan European only sector indices from EuroBench® - contain only those listed sectors that show strong relative performance in their group movements. Therefore, the indices may not represent the full range of activity in the sector. The IN. SECTS are not intended to be used as a basis for investment decisions. For more information on the IN. SECTS and EuroBench® is available at www.eurobench.com and www.insects.com . A free daily email service can be subscribed to for daily data on the IN. SECTS and EuroBench® is available at info@insects.com or by calling 020 7299 0600 or fax 020 7299 1390									
Sector	Index	Change	%	52 Week High	52 Week Low	1 Year High	1 Year Low	3 Year High	3 Year Low
Auto	100.00	+0.10	+0.10	100.00	100.00	100.00	100.00	100.00	100.00
Chemicals	100.00	+0.10	+0.10	100.00	100.00	100.00	100.00	100.00	100.00
Consumer Goods	100.00	+0.10	+0.10	100.00	100.00	100.00	100.00	100.00	100.00
Energy	100.00	+0.10	+0.10	100.00	100.00	100.00	100.00	100.00	100.00
Financials	100.00	+0.10	+0.10	100.00	100.00	100.00	100.00	100.00	100.00
Healthcare	100.00	+0.10	+0.10	100.00	100.00	100.00	100.00	100.00	100.00
Industrials	100.00	+0.10	+0.10	100.00	100.00	100.00	100.00	100.00	100.00
Media	100.00	+0.10	+0.10	100.00	100.00	100.00	100.00	100.00	100.00
Telecom	100.00	+0.10	+0.10	100.00	100.00	100.00	100.00	100.00	100.00
Utilities	100.00	+0.10	+0.10	100.00	100.00	100.00	100.00	100.00	100.00

Price data supplied by Reuters Data Services

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IN. SECTS is not a professional officer and does not provide officer advice.

IN. SECTS is not a professional director and does not provide director advice.

IN. SECTS is not a professional shareholder and does not provide shareholder advice.

IN. SECTS is not a professional creditor and does not provide creditor advice.

IN. SECTS is not a professional debtor and does not provide debtor advice.

IN. SECTS is not a professional guarantor and does not provide guarantor advice.

IN. SECTS is not a professional surety and does not provide surety advice.

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IN. SECTS is not a professional reinsurer and does not provide reinsurance advice.

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IN. SECTS is not a professional broker and does not provide brokerage advice.

IN. SECTS is not a professional agent and does not provide agency advice.

IN. SECTS is not a professional representative and does not provide representation advice.

IN. SECTS is not a professional intermediary and does not provide intermediary advice.

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IN. SECTS is not a professional organizer and does not provide organization advice.

IN. SECTS is not a professional planner and does not provide planning advice.

IN. SECTS is not a professional scheduler and does not provide scheduling advice.

IN. SECTS is not a professional timekeeper and does not provide timekeeping advice.

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IN. SECTS is not a professional auditor and does not provide

GLOBAL EQUITY MARKETS

GLOBAL EQUITY MARKETS

US INDICES

	Mar 12	Mar 11	Mar 10	1998/99 High	Low	Since completion
Dow Jones	9076.35	9077.44	9072.84	9077.44	9072.84	41.22
S&P 500	104.31	104.25	104.38	104.31	104.38	0.06
NASDAQ	3051.51	3057.65	3058.55	3058.55	3058.55	7.04
NYSE	304.51	301.57	301.55	301.55	301.55	15.33
FTSE 100	4011.2	4011.2	4011.2	4011.2	4011.2	0.00
DAX	3385.8	3385.8	3385.8	3385.8	3385.8	0.00
EURO STOXX	1200.0	1200.0	1200.0	1200.0	1200.0	0.00
NIKKEI 225	14500.0	14500.0	14500.0	14500.0	14500.0	0.00
TOPIX	1200.0	1200.0	1200.0	1200.0	1200.0	0.00
ASX 200	3000.0	3000.0	3000.0	3000.0	3000.0	0.00
SEMI-CONDUCTOR INDEX	10000.0	10000.0	10000.0	10000.0	10000.0	0.00
COMMODITIES	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
INDUSTRIAL	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
TECHNOLOGY	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
FINANCIAL	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
HEALTHCARE	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
ENERGY	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
CONSUMER	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
UTILITIES	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
RETAIL	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
TRANSPORT	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
TELECOM	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
REAL ESTATE	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
ARTS & ENTERTAINMENT	1000.0	1000.0	1000.0	1000.0	1000.0	0.00

(U.S. DJIA: Mar 10 104.31, Mar 11 104.25, Mar 12 104.38, 1998/99 High 104.31, Low 104.38, Since completion 0.06)
 (S&P 500: Mar 10 104.31, Mar 11 104.25, Mar 12 104.38, 1998/99 High 104.31, Low 104.38, Since completion 0.06)
 (NASDAQ: Mar 10 3051.51, Mar 11 3057.65, Mar 12 3058.55, 1998/99 High 3058.55, Low 3058.55, Since completion 7.04)
 (NYSE: Mar 10 304.51, Mar 11 301.57, Mar 12 301.55, 1998/99 High 301.55, Low 301.55, Since completion 15.33)
 (FTSE 100: Mar 10 4011.2, Mar 11 4011.2, Mar 12 4011.2, 1998/99 High 4011.2, Low 4011.2, Since completion 0.00)
 (DAX: Mar 10 3385.8, Mar 11 3385.8, Mar 12 3385.8, 1998/99 High 3385.8, Low 3385.8, Since completion 0.00)
 (EURO STOXX: Mar 10 1200.0, Mar 11 1200.0, Mar 12 1200.0, 1998/99 High 1200.0, Low 1200.0, Since completion 0.00)
 (NIKKEI 225: Mar 10 14500.0, Mar 11 14500.0, Mar 12 14500.0, 1998/99 High 14500.0, Low 14500.0, Since completion 0.00)
 (TOPIX: Mar 10 1200.0, Mar 11 1200.0, Mar 12 1200.0, 1998/99 High 1200.0, Low 1200.0, Since completion 0.00)
 (ASX 200: Mar 10 3000.0, Mar 11 3000.0, Mar 12 3000.0, 1998/99 High 3000.0, Low 3000.0, Since completion 0.00)
 (SEMI-CONDUCTOR INDEX: Mar 10 10000.0, Mar 11 10000.0, Mar 12 10000.0, 1998/99 High 10000.0, Low 10000.0, Since completion 0.00)
 (COMMODITIES: Mar 10 1000.0, Mar 11 1000.0, Mar 12 1000.0, 1998/99 High 1000.0, Low 1000.0, Since completion 0.00)
 (INDUSTRIAL: Mar 10 1000.0, Mar 11 1000.0, Mar 12 1000.0, 1998/99 High 1000.0, Low 1000.0, Since completion 0.00)
 (TECHNOLOGY: Mar 10 1000.0, Mar 11 1000.0, Mar 12 1000.0, 1998/99 High 1000.0, Low 1000.0, Since completion 0.00)
 (FINANCIAL: Mar 10 1000.0, Mar 11 1000.0, Mar 12 1000.0, 1998/99 High 1000.0, Low 1000.0, Since completion 0.00)
 (HEALTHCARE: Mar 10 1000.0, Mar 11 1000.0, Mar 12 1000.0, 1998/99 High 1000.0, Low 1000.0, Since completion 0.00)
 (ENERGY: Mar 10 1000.0, Mar 11 1000.0, Mar 12 1000.0, 1998/99 High 1000.0, Low 1000.0, Since completion 0.00)
 (CONSUMER: Mar 10 1000.0, Mar 11 1000.0, Mar 12 1000.0, 1998/99 High 1000.0, Low 1000.0, Since completion 0.00)
 (UTILITIES: Mar 10 1000.0, Mar 11 1000.0, Mar 12 1000.0, 1998/99 High 1000.0, Low 1000.0, Since completion 0.00)
 (RETAIL: Mar 10 1000.0, Mar 11 1000.0, Mar 12 1000.0, 1998/99 High 1000.0, Low 1000.0, Since completion 0.00)
 (TRANSPORT: Mar 10 1000.0, Mar 11 1000.0, Mar 12 1000.0, 1998/99 High 1000.0, Low 1000.0, Since completion 0.00)
 (TELECOM: Mar 10 1000.0, Mar 11 1000.0, Mar 12 1000.0, 1998/99 High 1000.0, Low 1000.0, Since completion 0.00)
 (REAL ESTATE: Mar 10 1000.0, Mar 11 1000.0, Mar 12 1000.0, 1998/99 High 1000.0, Low 1000.0, Since completion 0.00)
 (ARTS & ENTERTAINMENT: Mar 10 1000.0, Mar 11 1000.0, Mar 12 1000.0, 1998/99 High 1000.0, Low 1000.0, Since completion 0.00)

Standard and Poors
 Composite

	Mar 12	Mar 11	Mar 10	1998/99 High	Low	Since completion
Dow Jones	9076.35	9077.44	9072.84	9077.44	9072.84	41.22
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NIKKEI 225	14500.0	14500.0	14500.0	14500.0	14500.0	0.00
TOPIX	1200.0	1200.0	1200.0	1200.0	1200.0	0.00
ASX 200	3000.0	3000.0	3000.0	3000.0	3000.0	0.00
SEMI-CONDUCTOR INDEX	10000.0	10000.0	10000.0	10000.0	10000.0	0.00
COMMODITIES	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
INDUSTRIAL	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
TECHNOLOGY	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
FINANCIAL	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
HEALTHCARE	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
ENERGY	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
CONSUMER	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
UTILITIES	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
RETAIL	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
TRANSPORT	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
TELECOM	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
REAL ESTATE	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
ARTS & ENTERTAINMENT	1000.0	1000.0	1000.0	1000.0	1000.0	0.00

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TOPIX	1200.0	1200.0	1200.0	1200.0	1200.0	0.00
ASX 200	3000.0	3000.0	3000.0	3000.0	3000.0	0.00
SEMI-CONDUCTOR INDEX	10000.0	10000.0	10000.0	10000.0	10000.0	0.00
COMMODITIES	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
INDUSTRIAL	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
TECHNOLOGY	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
FINANCIAL	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
HEALTHCARE	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
ENERGY	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
CONSUMER	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
UTILITIES	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
RETAIL	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
TRANSPORT	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
TELECOM	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
REAL ESTATE	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
ARTS & ENTERTAINMENT	1000.0	1000.0	1000.0	1000.0	1000.0	0.00

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COMMODITIES	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
INDUSTRIAL	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
TECHNOLOGY	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
FINANCIAL	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
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ENERGY	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
CONSUMER	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
UTILITIES	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
RETAIL	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
TRANSPORT	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
TELECOM	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
REAL ESTATE	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
ARTS & ENTERTAINMENT	1000.0	1000.0	1000.0	1000.0	1000.0	0.00

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DAX	3385.8	3385.8	3385.8	3385.8	3385.8	0.00
EURO STOXX	1200.0	1200.0	1200.0	1200.0	1200.0	0.00
NIKKEI 225	14500.0	14500.0	14500.0	14500.0	14500.0	0.00
TOPIX	1200.0	1200.0	1200.0	1200.0	1200.0	0.00
ASX 200	3000.0	3000.0	3000.0	3000.0	3000.0	0.00
SEMI-CONDUCTOR INDEX	10000.0	10000.0	10000.0	10000.0	10000.0	0.00
COMMODITIES	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
INDUSTRIAL	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
TECHNOLOGY	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
FINANCIAL	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
HEALTHCARE	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
ENERGY	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
CONSUMER	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
UTILITIES	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
RETAIL	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
TRANSPORT	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
TELECOM	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
REAL ESTATE	1000.0	1000.0	1000.0	1000.0	1000.0	0.00
ARTS & ENTERTAINMENT	1000.0	1000.0	1000.0	1000.0	1000.0	0.00

Standard and Poors
 Composite

	Mar 12	Mar 11	Mar 10	
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WORLD MARKETS AT A GLANCE									
Country	Index	Mar 12	Mar 11	Mar 10	1998/99	Since completion	Yield	P/E	
Argentina	General	1728.42	1745.58	1723.31	2348.58	2348.58	12.00	13.5	
Brazil	IBOVEX	2501.3	2505.5	2501.3	2505.5	2505.5	12.00	13.5	
Canada	S&P 500	104.31	104.25	104.38	104.31	104.31	0.06	0.00	
France	FTSE 100	4011.2	4011.2	4011.2	4011.2	4011.2	0.00	0.00	
Germany	DAX	3385.8	3385.8	3385.8	3385.8	3385.8	0.00	0.00	
India	NSE SENSEX	3000.0	3000.0	3000.0	3000.0	3000.0	0.00	0.00	
Japan	NIKKEI 225	14500.0	14500.0	14500.0	14500.0	14500.0	0.00	0.00	
South Africa	JSE 100	10000.0	10000.0	10000.0	10000.0	10000.0	0.00	0.00	
Taiwan	TSE 100	10000.0	10000.0	10000.0	10000.0	10000.0	0.00	0.00	
UK	FTSE 100	4011.2	4011.2	4011.2	4011.2	4011.2	0.00	0.00	
US	DOW JONES	9076.35	9077.44	9072.84	9077.44	9077.44	0.00	0.00	

THE NASDAQ-AMEX MARKET GROUP

NASDAQ-AMEX MARKET GROUP												
Symbol	Price	Change	Volume	High	Low	Open	Close	Yield	P/E	Div	Div Yr	Div Pct
AA	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
AB	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
AC	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
AD	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
AE	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
AF	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
AG	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
AH	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
AI	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
AJ	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
AK	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
AL	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
AM	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
AN	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
AO	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
AP	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
AQ	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
AR	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
AS	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
AT	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
AV	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
AW	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
AX	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
AY	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
AZ	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
BA	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
BB	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
BC	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
BD	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
BE	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
BF	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
BG	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
BH	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
BI	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
BJ	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
BK	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
BL	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
BM	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
BN	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
BO	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
BP	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
BQ	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
BR	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
BS	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
BT	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
BV	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
BW	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
BX	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
BY	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
BZ	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
CA	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
CB	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
CC	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
CD	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
CE	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
CF	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
CG	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
CH	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
CI	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
CJ	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
CK	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
CL	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
CM	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
CN	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
CO	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
CP	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
CQ	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
CR	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
CS	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
CT	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
CU	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
CV	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
CW	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
CX	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
CY	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
CZ	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
DA	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
DB	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
DC	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
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DG	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
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DI	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
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DM	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
DN	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
DO	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
DP	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
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DS	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
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DU	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
DV	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
DW	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
DX	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
DY	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
DZ	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
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EB	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
EC	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
ED	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
EE	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
EF	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
EG	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
EH	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
EI	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
EJ	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
EK	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
EL	10.00	0.00	100	10.00	10.00	10.00	10.00	0.00	0.00			
EM	10.00	0.00	100	10.00	10.00	10.00	10.00	0				

FT GUIDE TO THE WEEK

MONDAY 15

Sticking to the agenda

Germany's watchword will be "business as usual" at today's regular meeting of European Union economics and finance ministers in Brussels. Last week's resignation of Oskar Lafontaine as Bonn finance minister will add an element of uncertainty to the proceedings. But the German presidency of the EU is determined that it will not hold up discussions on a lengthy agenda that includes such tricky issues as the Agenda 2000 negotiations on EU reform, the future of duty free sales within the EU and critical European Commission reports on the published plans of Paris and Bonn to cut budget deficits.

Commission probe

The European Commission holds an emergency meeting tonight to discuss what is expected to be a critical report from a five-member committee of experts on how the EU's executive body deals with fraud, mismanagement and nepotism. The report will be presented to Jacques Santer, the commission president, and José María Gil-Robles, the president of the European Parliament, late in the afternoon. There is likely to be heavy pressure for resignations from the parliament if the report singles out individual commissioners for wrongdoing.

WTO's green side

The Geneva-based World Trade Organisation hosts a high-level symposium on trade and environment over the next two days, followed by one on trade and development issues. The symposia are intended to create "an open dialogue" between environment, development and trade officials from national governments, academics and non-governmental organisations as well as international bodies including the World Bank, IMF and the United Nations. The WTO has been criticised by outside groups for not doing enough to accommodate environmental and sustainable development concerns.

Trade row hearing

The US Senate finance trade subcommittee holds a hearing on the agriculture trade disputes with European Union and China.

Protecting culture

Diplomats from nearly 100 states meet in The Hague to finalise a protocol strengthening the 1954 Hague convention on the protection of cultural assets at time of armed conflict. The protocol, a response to the wanton



Stout fellows: Wednesday's traditional St Patrick's Day festivities at the White House will be a celebration of the Irish peace process

destruction of cultural heritage in recent conflicts such as the shelling of Dubrovnik (Croatia), is due to be signed in May 1999. The two-week conference is hosted by the Dutch government and the United Nations Educational, Scientific and Cultural Organisation (Unesco).

Gulf War paybacks

The United Nations Compensation Commission meets in Geneva for four days to consider claims filed by corporations and governments arising out of Iraq's invasion of Kuwait in 1990. The commission has already resolved over 2.5m claims out of the 2.6m received and awarded compensation of \$7.4bn to 1.4m individuals and families. The remainder involve bigger more complex claims. The compensation awards are financed by 30 per cent of Iraqi oil revenues under the UN's "oil for food" mechanism.

Trilateral strategy

The Trilateral Commission in Washington concludes its 26th annual meeting of political, business and academic leaders from Europe, North America and Japan with a report on strategies for the 21st century.

Bug problems

A joint US Senate and House of Representatives hearing is held on year 2000 computer problems in the

Transportation Department and Federal Aviation Administration.

Holidays

Hungary, Liberia.

FT survey

Life Sciences.

TUESDAY 16

US Africa policy

A three-day US-Africa ministerial meeting opens in Washington, marking the first anniversary of President Bill Clinton's trek through the continent. The conference - to be attended by the president, nine US cabinet members and representatives from 46 African nations - focuses on the proposed legislation to give trade benefits and some debt relief to countries which adopt policies backed by the US.

FT survey

Middle East Banking.

WEDNESDAY 17

Olympian battle

The International Olympic Committee opens a two-day session in Lausanne

to discuss the Salt Lake City bribery scandal and decide whether to expel suspended members. The 112 members are expected to support president Juan Antonio Samaranch against calls for his dismissal.

Child protection

Norway will present a national plan to combat commercial sexual exploitation of children during the Stockholm ministerial meeting on children at risk in the Baltic Sea region. The meeting is a follow-up on last year's Tallinn conference and will be attended by government and parliamentary representatives and experts from the Baltic Region, European Union and United Nations.

Chinese overture

Li Yafei, deputy secretary-general of Beijing's Association for Relations Across the Taiwan Strait, visits Taiwan. He will prepare the ground for a planned visit by China's top Taiwan negotiator, Wang Daohan, which would be the highest-level exchange on Taiwan since the civil war split in 1949.

St Patrick's Day

President Bill Clinton hosts annual St Patrick's Day celebrations at the White House. Nobel prize winners John Hume and David Trimble will attend, with Sinn Féin leader Gerry Adams. Senator George Mitchell will receive

the Medal of Freedom, the highest honour available to a US civilian, in recognition of his work on the Good Friday agreement. There are hopes that the president's involvement will help break the deadlock over the issue of arms decommissioning. Mr Clinton will hold separate talks with the party leaders. The meeting will also give Al Gore, vice-president and likely Democratic candidate in the 2000 presidential elections, the opportunity to demonstrate his handling of the Irish issue in public.

Holidays

Ireland, Bangladesh.

THURSDAY 18

Pasok passions

Greece's governing Panhellenic Socialist Movement (Pasok) starts a four-day party congress. Costas Simitis, the prime minister, will come under fierce attack from the hard left faction over the government's bungled attempt to protect Abdullah Ocalan, the Kurdish guerrilla leader, its efforts to broaden privatisation and campaign to reform the education system. Mr Simitis's modernising faction, which claims to be supported by a majority of the 5,000 delegates, will battle for control of the party's central committee. Mr Simitis is unlikely to be challenged for the party leadership, but

the vote for seats on the executive board - still known as the politburo - will indicate whether his main rival,akis Tsachatzopoulos, the defence minister, is gaining ground.

Holidays

Mauritius, Indonesia.

FT survey

Review of Telecommunications.

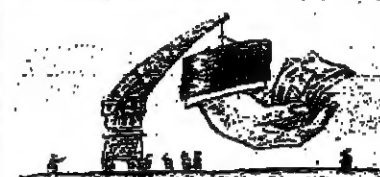
FRIDAY 19

Beef dispute report

The dispute settlement body of the World Trade Organisation meets in Geneva to hear a progress report from the European Union on compliance with a WTO ruling against its ban on hormone-treated beef. The meeting is also due formally to adopt two WTO rulings, on Japan's quarantine tests for apples and other fruit and on US anti-dumping duties on South Korean memory chips.

Threat to trade

Leon Brittan, European Commission vice-president, and Clare Short, UK



International development secretary, are among speakers at a London conference on the threat to world trade and investment posed by corruption.

Holidays

Malta, Spain.

FT surveys

FT Director: Cuba.

SUNDAY 21

Push for reform

European Union foreign ministers meet for a second weekend in succession in a bid to narrow differences over the Agenda 2000 negotiation on EU reform. Their "conclave" in Brussels will follow a week in which Gerhard Schröder, the German chancellor, will have visited EU capitals to assess the scope for compromise and ahead of the special March 24-25 EU summit in Berlin that is supposed to complete the negotiations.

Holidays

Namibia, South Africa, Syria, Tunisia, Mexico, Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan.

Compiled by Roger Beale
Fax 44 171 873 3196

ECONOMIC DIARY

Other economic news

Monday: The Japanese current account surplus is likely to have surged in January, by more than 90 per cent year on year.
Tuesday: New Zealand's central bank is expected to fix its official cash interest rate at between 4 per cent to 4.25 per cent. The cash rate approach replaces the use of the monetary conditions index to set policy, though this continues to be published.
Wednesday: UK labour market figures will confirm if the Bank of England is correct in its view that earnings pressures are abating. If so, more interest rate cuts could be coming.
Thursday: The European Central Bank meets to fix euro-zone interest rates in Frankfurt, as the IFO business climate survey for Germany is published. The survey is expected to show a further fall in confidence.
Friday: Inflation in Canada has consistently surprised the financial markets by being lower than expected. January's core inflation rate fell to 1 per cent, and is likely to fall below that level when the February figures are published.

Statistics to be released this week

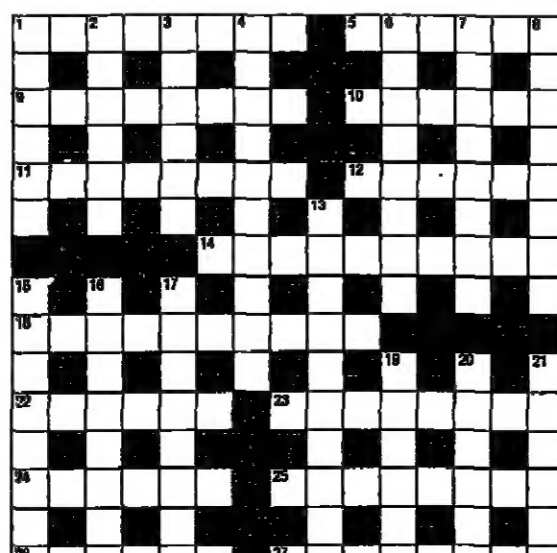
Day Released	Country	Economic Statistic	Median Forecast	Previous Actual	Day Released	Country	Economic Statistic	Median Forecast	Previous Actual
Mon	Japan	Feb money supply (M2+CDI)**		3.6%	US	Jan trade goods & services		-\$15.0bn	-\$13.8bn
Mar 15	Japan	Feb broad liquidity**		3.1%	US	Jan goods & services (BOP)		\$78.8bn	\$78.5bn
Tue	Japan	Jan industrial production†		0.6%	US	Jan goods & services import (BOP)		\$83.6bn	\$82.3bn
Mar 16	Japan	Jan shipments†		1.2%	US	Initial claims Mar 13		285k	285k
	UK	Feb pub sector net cash requirement	-\$2.5bn	-\$12.4bn	US	M2 - week ended Mar 8		-\$7.1bn	
	US	Feb building permits		1.78m	US	Mar Philadelphia Federal index			15.9
	US	Feb housing starts	1.75m	1.8m	Fri	Australia Q4 dwelling commencements			0.7%
	US	BTM Schrodgers, March 13		0.2%	Mar 18	France Jan industrial production†		0.5%	-1.6%
	US	Feb industrial production	unch	unch		France Jan ex. energy†		0.4%	-0.7%
	US	Feb capacity utilisation	80.3%	80.5%		Italy Jan CPI* (FOI)		0.1%	0.0%
	US	Redbook, March 13		0.1%		Italy Jan CPI** (FOI)		1.3%	1.5%
Wed	UK	Dec average earnings 3M**	4.3%	4.5%		Italy Jan CPI* (NIC)		0.1%	0.1%
Mar 17	UK	Jan unit wages 3M**		2.5%		Italy Jan CPI** (NIC)		1.5%	1.7%
	UK	Feb unemployment rate	0.0k	-5.7k		Italy Jan HICP*		0.1%	0.1%
	Canada	Jan wage settlement inc**	1.9%	2.2%		Italy Jan HICP**		1.5%	1.7%
Thur	Germany	Feb Ifo W Germany bus climate index 91.0		91.1		Italy Feb HICP*		0.2%	
Mar 18	Germany	Feb Ifo W Germany, balance format		-12.1		Italy Feb HICP**		1.4%	
	UK	Feb retail sales**	-0.5%	1.1%		Canada Feb CPI all items**		0.7%	0.6%
	UK	Feb retail sales**	1.6%	1.2%		Canada Feb CPI excluding food & energy**		0.8%	1.0%
	EMU	Dec trade world/ex-EMU		\$6.5bn		Canada Jan wholesale trade†		0.7%	1.3%
	UK	Feb prov M4*	0.7%	0.0%	During the week...				
	UK	Feb prov M4**	7.1%	7.3%	Japan	Feb Tokyo dept store sales**			4.5%
	UK	Feb M4 lending	\$4.5bn	\$4.7bn	Germany	Jan manuf orders pan-Germany*		0.3%	-0.1%
	US	Feb CPI	0.1%	0.1%	Brazil	Jan monetary base and M		7.2%	17.5%
	US	Feb CPI ex-food & energy	0.2%	0.1%	*month on month, **year on year seasonally adjusted				

ACROSS

- Student thrown outside (8)
- Said team sounded sad (6)
- Cum tunc stirred into cake (8)
- In the Balkans a secondary state (6)
- Anagram came in clue relating to Christian churches (10)
- Head waiter leaving Wyoming in terrible disgrace (8)
- Sacred building was in debt (8)
- Courses needing bringing back, it's emphasised (8)
- Disgraceful sweep goes to do Saul arranged (10)
- Overjoyed to find church uplifting still (8)
- Happening to need about nine policemen in time (8)
- Tiles upsetting to a heel (8)
- French money in a heap of rubbish (6)
- One writing things about street restaurant (6)
- Loose female relative goes to front door topless! (6)

DOWN

- College grounds American after party (6)
- Fancied a Parisian official (6)
- In the Balkans a secondary state (6)
- Anagram came in clue relating to Christian churches (10)
- Head waiter leaving Wyoming in terrible disgrace (8)
- Sacred building was in debt (8)
- Courses needing bringing back, it's emphasised (8)
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- Overjoyed to find church uplifting still (8)
- Happening to need about nine policemen in time (8)
- Tiles upsetting to a heel (8)
- French money in a heap of rubbish (6)
- One writing things about street restaurant (6)
- Loose female relative goes to front door topless! (6)



Winner of Puzzle No.9,926: M.R.G. Nicholls, Caterham, Surrey

MONDAY PRIZE CROSSWORD

No.9,838 Set by GRIFFIN

A prize of a Tombo Lucas fountain pen and rollerball set, worth £125, will be awarded for the first correct solution opened. Solutions by Thursday March 25, marked Monday Crossword 9,838 on the envelope, to the Financial Times, 1 Southwark Bridge, London SE1 9HL. Solution on Monday March 29. Please allow 28 days for delivery of prizes.

Name: _____
Address: _____

Solution 9,926

MOUNTAIN OPENERS
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S U G A A H N N
L A R P A I N R O G U E
B L U C E
I U I A G E A R A N D S O V
N N O A R A
A B E E A N S E A D A R E D
S O N E
R I G H T U N H A R D O P
A R I S O N A R
T H O U S E A U D E N S E
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